Army Regulation 40–60

MEDICAL SERVICES

POLICIES AND PROCEDURES FOR THE ACQUISITION OF MEDICAL MATERIEL

Headquarters
Department of the Army
Washington, DC
15 March 1983

UNCLASSIFIED

SUMMARY of CHANGE

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Effective 15 April 1983

MEDICAL SERVICES

POLICIES AND PROCEDURES FOR THE ACQUISITION OF MEDICAL MATERIEL

By Order of the Secretary of the Army:

E. C. MEYER
General, United States Army
Chief of Staff

Official:

ROBERT M. JOYCE
Major General, United States Army
The Adjutant General

History. This publication has been reorganized to make it compatible with the Army electronic publishing database. No content has been changed.

Summary. This regulation implements Army policy and outlines procedures for the acquisition of materiel as it pertains to The Surgeon General's responsibility for managing medical commodities.

Applicability. This regulation applies to the Active Army. It also applies to the US Army Reserve (USAR) and the Army National Guard (ARNG) for budgeting, procurement, fielding, and redistribution of equipment. (See chaps 3 and 4.)

Proponent and exception authority. The proponent agency of this regulation is the Office of the Surgeon General.

Army management control process. This regulation does not contain information that affects the New Manning System.

Supplementation. Supplementation of this regulation is prohibited unless prior approval is obtained from the Office of The Surgeon General (HQDA(DASG-HCL)), WASH DC 20310

Interim changes. Interim changes to this regulation are not official unless they are authenticated by The Adjutant General. Users will destroy interim changes on their expiration dates unless sooner superseded or rescinded.

Suggested Improvements. Users are invited to send comments and suggested improvements on DA Form 2028 (Recommended Changes to Publications and Blank Forms) directly to HQDA(DASG-HCL), WASH DC 20310.

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RESERVED

Chapter 1
INTRODUCTION

1–1. Purpose.
This regulation-

a. Establishes basic Army Medical Department (AMEDD) policy and procedures to develop, acquire, and field medical materiel used by the Army.

b. Supplements basic Army policies and procedures as outlined in AR 70-1 and AR 1000-1.

c. Expands on the responsibilities for medical materiel development cited in AR 40-61.

1–2. Applicability.
This regulation applies to the Active Army. It also applies to the US Army Reserve (USAR) and the Army National Guard. (ARNG) for budgeting, procurement, fielding, and redistribution of equipment. (See chaps 3 and 4.)

1–3. Impact on the New Manning System.
This regulation does not contain information that affects the New Manning System.

1–4. Scope.
a. This regulation describes the materiel acquisition process from initiation (identification of mission need or mission profile) through successful completion of development, procurement, deployment, and management. The acquisition process satisfies materiel requirements generated by doctrinal and organizational revisions to table(s) of organization and equipment (TOE). It further satisfies user-generated requirements, state-of-the-art advancement and initiatives to enhance materiel readiness.

b. The Program Management Plan (PMP) addresses systems under development. It will be revised to conform to this regulation to the extent such revision is practicable.

1–5. References.
Required and related references are listed in appendix A.

1–6. Explanation of abbreviations and terms.
Abbreviations and special terms used in this regulation are explained in the glossary.

1–7. Objectives.
The objectives of the acquisition process for medical materiel systems are to-

a. Outline procedures for developing and acquiring materiel systems from investigation of the materiel concept through deployment to the Army in the field.

b. Insure that materiel provided to the Army in the field meets approved operational requirements and is capable of being manned effectively and supported logistically.

c. Insure all materiel fielded is safe for use as determined by a health hazard assessment(HHA).

d. Identify organizational policies and responsibilities and implement an effective management structure to develop and acquire medical materiel.

e. Modernize medical assemblages and enhance overall TOE development and materiel readiness.

f. Improve coordination and staffing within the AMEDD and between major Army commands (MACOMs).

g. Provide effective materiel systems to maintain the health of the forces when considering demands on the delivery of health care created by technological advancements in combat weapons and tactics.

1–8. Policies.
a. A formal memorandum of understanding may be initiated between responsible commands and proper field activities of TSG to support this regulation.

b. Review and development of medical assemblages will coincide with the cyclic review of the TOE that they support.

c. Medical materiel proposals will be assessed for potential acquisition and nondevelopment items (NDIs).

d. Investment medical materiel (unit cost of $3,000 or more) and initial fielding of medical assemblages will be programmed centrally and funded by TSG.

e. After formal approval by TSG, the acquisition process for medical materiel will be conducted according to an AMEDD Priority Program (PRIPROG) developed by the-

(1) Academy of Health Sciences, US Army (AHS).

(2) US Army Medical Research and Development Command (USAMRDC).

(3) US Army Medical Materiel Agency (USAMMA).

(4) Army Medical Department Technical Committee (AMDTC).

f. Materiel proposals (new, replacement items, or product improvement) will be considered for inclusion in the formal Medical Materiel Acquisition Process (MEDMAP).

g. The materiel developer, combat developer, trainer, tester, and logistician will coordinate all formal documents and decision processes generated during the MEDMAP with the Office of The Surgeon General (OTSG) before their submission to-

(1) Department of the Army (DA).

(2) MACOMs.

(3) Other external agencies and activities.

h. Materiel systems will be acquired within the shortest reasonable time. The goal is to achieve first unit equipped date (FUED) within 3 years after full-scale development (FSD) approval and to do so within established cost goals without incurring inordinate risks. However, the timing of the planning, programming, budgeting, and execution system (PPBES) cycle must also be considered in the acquisition strategy, and must be accommodated to that cycle.

i. Acquisition within compressed timeframes may be necessitated because of operational requirements for urgent health care. Under such circumstances, the acquisition process must be tailored and closely coordinated by those taking part in the MEDMAP. The acquisition strategy will be jointly developed by in-process review (IPR) participants. When tailoring the acquisition strategy, the requirement to submit a final basis of issue plan (FBOIP) and final military occupational specialty (MOS) decision to HQDA (DAMO-RQR) for approval 14 months before type classification date (TCD) or 26 months before equipment availability date (EAD) will be considered. Final approval authority for tailoring acquisition strategy rests with the AMDTC.

Chapter 2
RESPONSIBILITIES

2–1. Scope.

This chapter contains specific responsibilities concerning medical materiel acquisition. (See AR 10 series for general responsibilities of Army elements.) Responsibilities for programming and budgeting of funds are outlined in chapter 4.

2–2. The Surgeon General (TSG).

TSG, as the medical materiel developer for the Army, will-

a. Have the overall responsibility for the research, development, test, and evaluation (RDTE) and acquisition of medical materiel and related items.

b. Delegate the authority for carrying out this responsibility to agencies primarily responsible for specific events within the materiel acquisition process.

c. Coordinate the rationalization, standardization, and interoperability (RSI) considerations both with other Services as well as the North Atlantic Treaty Organization (NATO) and the American, British, Canadian, and Australian (ABCA) Armies throughout the medical materiel acquisition process.

d. Review and approve all requirements documents authenticated by the-

(1) Combat developer (AHS) and materiel developer (USAMRDC), or

(2) Combat developer (AHS) and mission assignee agency (USAMMA) for NDIs and medical equipment sets (MESs).

e. Submit requirements documents for major programs, designated acquisition programs, and DA IPR programs to HQDA for approval.

f. Provide an observer on all IPRs.

g. Approve through AMDTC action-

(1) Type classification of newly developed and adopted medical materiel.

(2) Recommended priorities to develop and field recommendations of the AMEDD Priority Program (PRIPROG).

h. Implement resource requirements for medical materiel fielding through the PPBES process.

i. Provide members of all DA-established committees involved with the development, acquisition, and deployment of military equipment.

j. Be responsible for the Army's HHA program; provide advice and consultation to the materiel developer and combat developer to investigate health-related problems associated with medical and nonmedical materiel acquisition programs.

2–3. Headquarters, Department of the Army (HQDA) agency heads.

Army Staff agency heads will take part in the materiel acquisition process as follows:

a. Deputy Chief of Staff for Personnel (DCSPER). The DCSPER will-

(1) Establish policies, plans, and programs for developing, implementing, and maintaining-

(a) Military occupational classification structure.

(b) Civilian position structure.

(2) Approve MOS, special skill identifier (SSI), and civilian occupational series decisions.

(3) Act as the office of record for qualitative and quantitative personnel requirements information (QQPRI) and approved MOS decisions.

b. Deputy Chief of Staff for Operations and Plans (DCSOPS). The DCSOPS will-

(1) Have Army Staff responsibility to process and approve BOIP, QQPRI, Required Operational Capability (ROC), and proposed MOS decisions.

(2) Be the central office of record for BOIPs.

c. Other Army Staff agency heads. Heads of other Army Staff agencies will review requirements documents, and BOIP, QQPRI, proposed MOS, SSI, and civilian occupational series decisions. They will make recommendations to-

(1) Office of the Deputy Chief of Staff for Operations and Plans (ODCSOPS), for requirements documents and BOIPs.

(2) Soldiers Support Center, National Capital Region (SSC-NCR), Alexandria, VA 22332, for QQPRI and proposed MOS and SSI decisions.

2–4. Commanding General, US Army Materiel Development and Readiness Command (CG, DARCOM).

CG, DARCOM will-

a. Assign a developmental line item number (Z LIN) and a standard study number (SSN), if appropriate, for each developmental item that must be type classified.

b. When an item is type classified, assign a standard line item number (STD UN) to the item.

c. Publish Z LINs and STD LINs in SB 700-20.

d. Submit basis of issue plan feeder data (BOJPFD) and QQPRI for review and submission to TRADOC as a package for BOIP development when development and management of items developed by DARCOM are the responsibility of different commands or agencies; for example, TSG. The data will be submitted through DARCOM's Materiel Readiness Support Activity (MRSA).

2–5. Commanding General, US Army Training and Doctrine Command (CG. TRADOC).

CG, TRADOC, as the Army's principal combat developer, will-

a. Provide parameters and guidance to other combat developers and MACOMs to prepare the BOIPs.

b. Develop, review, update, and coordinate the BOIP, QQPRI, and proposed MOS decisions for all items of equipment to include nondevelopment items entering the Army Supply System; forward those documents along with requirements documents (ROC only for medical items) to HQDA (DAMORQR) WASH DC 20310 for approval]. All known requirements will be shown according to AR 71-2.

c. Submit FBOIP, final QQPRI (FQQPRI), proposed final MOS (FMOS), SSI, and civilian occupational series decisions to HQDA (DAMO-RQR), WASH DC 20310,14 months before the TCD if the EAD is at least 12 months after the TCD. If the EAD is less than 12 months beyond TCD, FPBOIP, FQQPRI, and MOS decisions will be submitted 26 months be fore the EAD.

2–6. Commanding General, US Army Health Services Command (CG, HSC).

CG, HSC, as the combat, doctrine, and training developer for the AMEDD, will-

a. Delegate authority to the AHS to carry out the responsibilities of combat developer, trainer, and operational or user tester for field medical materiel. (These activities will be performed within guidelines set by CG, TRADOC and Army health standards established by TSG. Details of this working relationship will be reflected in a memorandum of agreement between CG, TRADOC and CG, HSC.)

b. Be responsible for medical user tests to include programming and budgeting funds required to conduct AMEDD-originated user tests; provide qualified AMEDD consultants and on-site test advisors to the test organization to assist with test planning, execution, and reporting.

c. Establish a combat development advisory council to develop medical materiel and medical sets, kits, and outfits.

d. Program and budget for required funding and other resources to support AMEDD originated user tests.

2–7. Commanding General, US Army Medical Research and Development Command (CG, USAMRDC).

CG, USAMRDC, as the materiel developer in the MEDMAP, an authority delegated by TSG, will-

a. Maintain the medical technology base; monitor research and development (R&D) efforts in US civilian and Federal communities as well as medical technology efforts in foreign countries.

b. Conduct basic research, exploratory development. advanced development, and engineering development for medical materiel systems.

c. Determine, in coordination with AHS and USAMMA, the need for associated support to include personnel, training, and equipment.

d. Initiate BOIPFD and QQPRJ for all developmental medical materiel systems in accordance with AR 71-2.

e. Assure that-

(1) Health hazards and safety of each developmental medical materiel system or item are assessed.

(2) Adequate funds are programmed for HHA and system safety planning and assessment.

(3) Sufficient health hazard and safety data are acquired, through testing and R&D, to resolve health and safety issues.

(4) Corrective actions have been taken to eliminate or reduce health and safety risks.

f. Issue the safety statement before developmental testing and a safety release before any testing involving the use of troops.

g. Prepare the PMP, in coordination with all AMEDD acquisition process participants, to acquire developmental medical materiel.

h. Conduct development testing (DT) in accordance with AR 70-10 for all developmental medical materiel systems.

i. Provide system support package (SSP) and advance inventory for the package, required for user test of developmental medical materiel, to the test organization.

j. Develop a technical data package (TDP) before the Development Validation (DEVA) IPR.

k. Determine jointly with the combat developer (AHS) realistic reliability, availability, and maintainability (RAM) requirements based on the mission profile; maintain the RAM data base for developmental medical materiel.

l. Function as IPR chairman and Test Integration Working Group (TIWG) chairman for developmental medical materiel systems.

m. Develop new equipment training (NET) training test support packages (TTSPs) for developmental medical materiel in conjunction with the training developer; provide them to user test organizations and trainers.

n. Prepare, coordinate, and execute the AMEDD Product Improvement Program (PIP).

o. Develop and maintain an Integrated Logistic Support (ILS) Program for developmental medical materiel.

p. Acquire advanced development and engineering development prototype systems for all developmental medical materiel systems.

q. Develop and acquire test instruments costing in excess of $1,000 to satisfy user testing requirements according to AR 70-10.

r. Provide operational test readiness statement (OTRS) to the test organization for developmental medical materiel.

s. Prepare life-cycle environmental impact assessments (EIAs) and environmental impact statements (EISs) covering environmental impact during all planned testing, use, and disposal of developmental materiel.

t. Prepare supplements to installation EIAs and EISs, as required, in coordination with installation environmental coordinators and the US Army Environmental Hygiene Agency (USAE HA).

u. Provide training, to test troops, test organizations, and trainers for testing of developmental medical materiel for Operational Test I (OT I). For OT II and IIa, provide training to the trainers who, in turn, will train the test troops.

v. Assist, monitor, and take part in planning and conducting user tests of developmental materiel.

w. Serve as voting member for the AMEDD PRIPROG for medical materiel systems development.

x. Review automated modeling techniques of combat developers relating to impact of R&D efforts .

y. Submit quarterly reports of the status of materiel systems, including applicable milestones, to the AMDTC.

2–8. Commandant, Academy of Health Sciences (Comdt, AHS), US Army.

The Comdt, AHS, as the principal agent to CG, HSC for medical, combat, doctrine, and training development in support of the Army in the field, will-

a. Be responsible for developing doctrine, organization, and systems within guidelines established by CG, TRADOC; through the CG, HSC; in accordance with Army health care standards established by TSG.

b. Serve as a voting member on the IPR in MEDMAP.

c. Serve as a voting member on the AMEDD PRIPROG.

d. As the combat developer-

(1) Represent the Cdr, HSC in the acquisition process for medical materiel.

(2) Determine items of medical materiel required to-

(a) Implement force development objectives.

(b) Support medical concepts of operations, organization, and doctrine.

(3) Review and coordinate medical materiel proposals, equipment improvement recommendations, and suggestions to identify and evaluate the need for the new or improved medical materiel.

(4) Schedule, review, .and initiate actions to modify medical assemblage component configuration; develop, in coordination with other participants in the MEDMAP, new medical assemblages to include sets, kits, and outfits to support AMEDD missions.

(5) Prepare the proper Army requirements documents, in coordination with the materiel developer, logistician, mission assignee agency, and OTSG, to include-

(a) Justification for Major System New Starts (JMSNS).

(b) Letter of Agreement (LOA).

(c) Required Operational Capability (ROC).

(d) Joint Service Operational Requirement (JSOP).

(e) Letter Requirement (LR).

(6) Review and validate product improvement proposals for medical materiel to insure that the proposals are compatible with stated materiel objectives.

(7) Develop proposed priorities for research, development, and acquisition of medical materiel and medical assemblages for AMEDD PRIPROG review and AMDTC approval.

(8) Review Army medical and nonmedical materiel development and testing documents to insure that the following have been addressed:

(a) Control of potential health hazards.

(b) Environmental impact.

(c) Human engineering factors.

(9) Determine, jointly with the materiel developer, realistic RAM characteristics consistent with materiel operational and support requirements as well as AMEDD doctrine. organization, and force structure.

(10) Develop. review, update, and coordinate BOIPs and QQPRI for medical equipment proposed to enter the Army and the Department of Defense (DOD) Supply Systems: forward the results of these actions to CG, TRADOC.

(11) Represent the user in all studies, testing, evaluations, acquisition decisions, and priority of efforts supporting the development of medical materiel.

(12) Review agenda, develop positions, and provide observers to the IPR.

(13) Prepare and coordinate the Minor Medical Equipment Requirement (MIMER) for medical items that require standardization and acquisition but are exempt from type classification.

(14) Review, coordinate, and comment on materiel requirements documents proposed by other combat developers, ABCA Armies, and NATO standardization proposals.

(15) Identify readiness significant components (RS Cs) of medical assemblages.

(16) Prepare independent evaluation plans (IEPs), conduct independent evaluations (IEs), and prepare independent evaluation reports (IERs) for materiel acquisition and developmental requirements.

(17) Provide doctrinal, organizational, and threat test support packages (TSPs) and test readiness statements (TRSs) to the test organizations.

(18) Provide outline test plan (OTP) and resume sheet (RS) input to designated test organization.

(19) Chair, and serve as voting member of, the AMEDD PRIPROG.

(20) Take part, as requested by the test organization, in preparing test design plans; monitor conduct of user tests.

(21) Prepare and provide future short- and long-range requirements (5 to 15 years).

(22) Jointly prepare, in coordination with the medical materiel developer, elements of the concept formulation package (CFP).

e. As training developer

(1) Represent CG, HSC in the MBDMAP.

(2) In coordination with the combat developer, materiel developer, and logistician, develop training concepts for inclusion in the review and analysis of the materiel proposal.

(3) Take part in preparing requirements documents, and coordinated test programs (CTPs): provide position on training; serve as observer in IPRs.

(4) Identify and prepare Training Device Requirements (TDRs) to support the materiel acquisition process in coordination with the proper commands and organizations in the MEDMAP.

(5) Develop the training part of the OTRS (AR 71-3).

(6) Review test reports, and, as requested by the test organization, take part in preparing test design plans.

(7) Serve as voting member of the AMEDD PRIPROG.

(8) Provide TTSPs to the test organization.

(9) Provide for pretest training of test troop personnel for OT II, OT ha, and other user tests.

f. As tester-

(1) Represent the CG, HSC, as a test organization and function as the AMEDD Test Board.

(2) Prepare test design plans and conduct user tests (OTs), Force Development Test and Experimentations (FDTEs); and Concept Evaluation Program (CE P) tests of materiel, doctrine, organization, and tactics (including tests of training devices developed to support the materiel acquisition process).

(3) Prepare and publish reports of user tests.

(4) Take part in an observer status at IPRs.

(5) Provide input to the CTP for user tests and take part in the Test Integrated Working Group (TIWG) as a member representing the operational or user tester.

(6) Develop and submit OTPs and RSs when required for scheduling user tests on medical materiel.

(7) Take part as the AMEDD test representative, in planning, conducting, and reporting user tests required by nonmedical test organizations.

(8) Identify and acquire test instrumentation costing less than $1000 to satisfy user testing requirements according to AR 70-10.

2–9. Commander.

US Army Medical Materiel Agency (Cdr, USAMMA). Cdr, USAMMA, as the mission assignee and medical logistician in the MEDMAP, an authority delegated by TSG, will-

a. Take part as a voting member of IPRs. TIWGs, and other Joint Working Groups (JWGs) on the acquisition of medical materiel.

b. Evaluate the ILS Program for medical materiel.

c. Manage the transition of medical equipment and sets, kits, and outfits from the Demonstration and Validation Phase to the Production and Deployment Phase. Those actions required to support type classification and/or standardization are included.

d. Evaluate and manage the materiel readiness aspects of the acquisition process for medical materiel.

e. Develop the logistic support requirements as an integral part of the medical materiel acquisition process in coordination with the-

(1) Combat developer (AHS).

(2) Materiel developer (USAMRDC).

f. Review draft requirements documents to determine their adequacy and feasibility from a logistics viewpoint.

g. In coordination with the materiel developer (USAMRDC), combat developer and training developer (AHS), evaluate all medical materiel for logistic supportability to include-

(1) Reliability, availability, and maintainability (RAM). (See AR 702-3.)

(2) Consideration of reliability centered maintenance (RCM).

h. Insure that medical materiel development efforts include provisions for logistics support by reviewing all development-related documents for logistical support implications. Development related documents include-

(1) Requirements documents.

(2) PMPs.

(3) Test plans and reports.

(4) Maintenance test support packages.

i. Serve as the central collection point for all user complaints issued against the performance, reliability, maintainability, or safety of field medical equipment.

j. Establish and maintain logistical database to validate medical materiel requirements; provide logistical intelligence as required.

k. Acquire and coordinate the building (packing and packaging) of prototype medical assemblages.

l. Review and certify the qualifications of logistical support personnel serving as participants in user and operational testing.

m. Serve as a voting member of the AMEDD PRIPROG.

n. Represent TSG as the mission assignee agency for the acquisition and fielding of NDIs and MESs.

o. Conduct market surveys, prepare the BOIPFD report and QQPRI, prepare PMPs and materiel fielding plans (MFPs), TTSPs, and other actions needed to support the acquisition of NDIs.

p. Under AR 71-2, AR 708-1, and AR 710-60 and in coordination with CG, DARCOM, obtain and assign Z LINs and STD LINs, as required, for all items of medical equipment entering the Army Supply System.

q. Conduct; or arrange for the conduct of operational or user testing of NDIs, as required.

r. Provide test support documents for NDIs, to the testing organization, based on user testing requirements identified by the combat developer and training developer during TIWG or JPRs for NDIs.

s. Identify and centrally manage test, measurement, and diagnostic equipment (TMDE) requirements throughout the MEDMAP according to AR 750-43.

2–10. Commander, US Army Environmental Hygiene Agency (Cdr, USAEHA).

Cdr, USAEHA will-

a. Validate materiel developer HHA efforts by-

(1) Providing technical services to evaluate developer data-gathering methodology.

(2) Providing interpretation of test results.

(3) Conducting, when required, on-site data gathering for those systems when-

(a) User health hazards cannot be addressed by the developer.

(b) Developer data require further resolution.

b. Develop recommended standards and specifications, for issue by OTSG, that pertain to user exposure to Army materiel, using data bases provided by USAMRDC or other recognized sources.

c. Review requirements documents and HHA study results; provide recommendations for both OTSG and developers concerning issues that warrant HHAs or specific instances when hazards should be reduced.

d. Act on behalf of TSG, when directed, for issues requiring technical input to HHA aspects of medical materiel acquisition.

Chapter 3
MEDICAL MATERIEL ACQUISITION PROCESS (MEDMAP)

Section I
POLICY

3–1. General.

The MEDMAP-

a. Formalizes the process by which TSG implements responsibility specified in AR 70-1 and AR 1000-1 for-

(1) Medical RDTE.

(2) Life-cycle management of Army medical materiel.

b. Establishes the requirements and procedures for research, development, and acquisition of medical materiel.

c. Is an event or decision-oriented management structure that outlines the process for-

(1) Improvement of existing medical materiel systems,

(2) Development of new medical materiel, or

(3) Acquisition of nondevelopmental medical materiel.

d. Provides a framework within which documents and decision processes are identified in relation to milestones to include the following aspects of medical materiel:

(1) RSI coordination.

(2) R&D.

(3) Logistics.

(4) Training.

(5) Testing.

(6) Initial fielding.

e. Is based upon two major objectives. These objectives are to-

(1) Provide a framework permitting the use of the most cost effective and operationally efficient means of achieving the desired capability.

(2) Improve the timeliness for acquiring and fielding medical materiel.

f. Has the ILS Program, as outlined in AR 700-127, incorporated as an integral part. (In general. ILS elements will be tailored to meet abbreviated acquisition strategies discussed in this regulation. ILS considerations will not be excluded under any circumstance.)

3–2. Satisfying materiel requirements.

The materiel needs of the army are generally satisfied through four alternative methods discussed below:

a. Product improvement of current standard equipment. Product improvement is usually the preferred method to satisfy requirements. This method exploits the performance growth potential inherent in already developed systems. (See AR 70-15 and sec III of this chap.)

b. Acquisition of nondevelopment items (NDIs). Purchase of existing domestic or foreign materiel items (NDIs) that do not require any developmental work can provide a relatively quick, low-cost response to some requirements. (See AR 70-1 and sec II of this chap.)

c. Adaptation of commercial items for military use. Modification of existing commercial, other Service, or foreign-developed items may be necessary to meet specific requirements. If modification does not require RDTE funds, NDI procedures apply. (See AR 70-1.)

d. Initiation of a new materiel development program. A new development program is usually the longest and most costly alternative means for satisfying a materiel need. Provision for evolutionary development or preplanned product improvement will permit the later improvement of a system's capability. Materiel system design within such a new program will emphasize-

(1) Simplicity.

(2) Austerity.

(3) Supportability.

(4) Interoperability with the systems of allies.

(5) When the additional cost can be justified, planned future growth potential to accommodate anticipated future needs.

3–3. Managing medical materiel.

a. DA Pam 11-25 provides a schematic portraying the systematic interaction of the participants through the four phases of the full developmental acquisition process listed below. It places specific events in the process in the proper perspective. The schematic should be tailored as required to accommodate specific responsibilities and procedures inherent in managing medical materiel. The four stages of the process are as follows:

(1) Concept Exploration (Phase 0).

(2) Demonstration and Validation (Phase I).

(3) Full-Scale Development (Phase II).

(4) Production and Deployment (Phase III).

b. Acquisition of MESs and the MIMER requires specialized management programs. These programs are not fully accommodated through the tailoring of the management model in DA Pam 11-25. (Sec IV of this chap discusses these special programs.)

3–4. AMEDD Priority Program (PRIPROG).

a. The AMEDD PRIPROG for the MEDMAP provides TSG with a formal mechanism for setting AMEDD priorities to develop and field medical materiel for support of TOE requirements within approved priorities for the Army.

b. Representatives from the combat developer (AHS), the materiel developer (USAMRDC), the logistician (USAMMA), the training developer (AHS), and the OTSG will meet to review or update the PRIPROG at least yearly.

c. The combat developer (AHS) is the proponent activity and will serve as chairman for the AMEDD PRIPROG.

d. Recommended priorities will be submitted to the AMDTC for final approval.

e. As a minimum, the following items will be considered in the AMEDD PRIPROG;

(1) Overall Army and AMEDD objectives: published Office of the Secretary of Defense (OSD) and DA program guidance.

(2) Army program objective memorandum (POM) initiatives.

(3) Contingency requirements and materiel readiness.

(4) Available and projected funding resources.

(5) MEDMAP.

(6) Health Services Long-Range Plan.

f. AMEDD PRIPROG provides TSG with-

(1) A rank ordering of medical materiel needs into a single yearly prepared list of RDTE, Operation and Maintenance, Army (OMA), Operation and Maintenance, Army Reserve (OMAR), Operation and Maintenance Army National Guard (OMARNG), and Procurement Appropriations (PA) funded items and systems based on their relative contribution to achieving desired medical support within a theater of operations.

(2) A priority list of medical materiel requirements within funding programs to serve as a basis for input to the Army POM. The priority list will document the following:

(a) Relative importance of items and systems satisfying doctrinal deficiencies.

(b) Degree to which force structure deficiencies would be corrected.

(c) Priority of need for items and systems in terms of overall Army objectives and readiness and contingency considerations.

(3) A data base for preparation of acquisition proposals (LOA, LR, ROC, PIP) for new items and Systems of medical materiel.

3–5. Validation and decision review.

Management control for the MEDMAP will be exercised through periodic JWGs, TIWGs, IPRs, and the AM DTC.

a. JWG or TIWG. A JWG or TIWG will be convened for those actions not requiring decision review by an IPR.

(1) A JWG is convened at the call of any participant to revise project status or to determine a proper course of action when a formal decision is not required.

(2) A TIWG makes the integration of test requirements easier and accelerates the CTP coordination process. Specific membership for a certain TIWG will be dictated by the nature of the program: however, ordinarily the TIWG will be composed of MEDMAP principal and associate participants.

b. In-process review (IPR).

(1) The number and timing of the IPR may vary from one acquisition process project effort to another. As a

minimum, an IPR will be held to review a materiel proposal for continuation at the end of the Demonstration and Validation Phase before movement into the Full-Scale Development Phase, and before movement into the Production and Deployment Phase.

(2) NDI acquisition normally requires only one IPR between the Requirement Definition and Planning Phase arid the Acquisition and Deployment Phase but can be called at any time by one of the participants.

(3) The IPH is composed of voting members representing the AHS, the materiel developer, and the logistician. The OTSG, the training developer, and the test organization have nonvoting observer status. The IPRs for MESs and NDIs will be chaired the first year by USAMRDC; the chair will rotate to USAMMA and AHS, then the USAMRDC yearly. Agenda items may be submitted by any participant.

(4) An IPR will be administratively conducted according to AR 70-1. IPR results requiring HQDA approval will be forwarded to TSG for approval.

(5) Should an IPR fail to resolve any opposing positions, the minutes of the IPR will be forwarded to OTSG for resolution by the AMDTC.

c. AMEDD Technical Committee (AMDTC).

(1) The AMDTC serves as a permanent advisory board to TSG. It provides general officer review of field medical support systems for delivery of combat medical care.

(2) The committee has oversight and review responsibility for combat health care doctrine. It is the principal staff interface between the combat developer and the materiel developer.

(3) The primary objective of the AMDTC is to develop recommendations for approval of TSG concerning

(a) Doctrinal modification for medical support, and specific field requirements for this modification.

(b) Recommendations for improving existing field materiel and its use.

(c) Evaluation of operational tests of concepts or materiel.

(d) Type classification of medical materiel.

(e) The AMEDD Priority Program (PR IPROG). .

(f) Quarterly review of status reports of materiel systems and constructive evaluation of these reports.

(4) The composition of the AMDTC is directed by TSG.

3–6. Initiation and approval of medical materiel proposals and requirements.

a. Medical materiel proposals and requirements involving the need for changes to MESs or new materiel requirements will be forwarded to the combat developer who will prepare applicable requirements documents if necessary. Medical materiel proposals and requirements involving a product improvement will be forwarded to Cdr, USAMRDC for required review and action. Any proposed action that does not fit one or more of the justification categories defined in AR 70-15 will not be regarded as a viable PIP candidate.

b. A medical materiel proposal or requirement, to include product improvements, may be initiated by-

(1) The combat developer in support of new or changes to MES development efforts to-

(a) Correct an operational shortcoming or inadequacy in existing materiel, as a result of new doctrine, or

(b) Take advantage of a breakthrough in technology.

(2) The materiel developer, or the logistician, when a change in technological advancement or state-of-the-art advances warrant equipment improvements or developments.

(3) The logistician when acquisition problems evolve concerning adopted items, or should materiel readiness unduly suffer.

(4) The combat developer, materiel developer, or logistician in response to operational concepts, materiel proposals, or ideas and suggestions both formally and informally submitted from field activities or any other source.

c. Requirements documents to support medical materiel needs will be-

(1) Authenticated by the combat developer (AHS), the materiel developer (USAMRDC), the logistician or mission assignee (USAMMA).

(2) Approved by TSG.

d. Requirements documents to support the acquisition and fielding of NDIs and MESs will be

(1) Authenticated by the combat developer (AHS) and the mission assignee agency (USAMMA).

(2) Approved by TSG.

(3) Coordinated with the medical materiel developer (USAMRDC).

Section II
NONDEVELOPMENT ITEM (NDI) ACQUISITION PROCESS

3–7. Nondevelopment items (NDIs).

NDIs are those items determined by a JWG or an IPR to be available for acquisition to satisfy a materiel requirement with no expenditure of RDTE funds to develop, modify, or improve them.

3–8. Phases of the NDI acquisition process.

The NDI acquisition process is composed of two phases as follows:

a. Requirement definition/planning.

b. Acquisition/deployment.

3–9. Processing an NDI.

A BOIP, if required, and an expedited QQPRI will be initiated by the mission assignee agency according to AR 71-2 as follows:

a. Normally only a FBOIP and QQPRI will process an NDI.

b. Final BOIPFD and FQQPRI are required by CG, TRADOC 21 months before the TDC or 33 months before the EAD.

3–10. Outline of the NDI process.

The total NDI process is outlined in AR 70-1. Appendix B and figure 3-1 of this regulation outline the process as it applies to the MEDMAP.

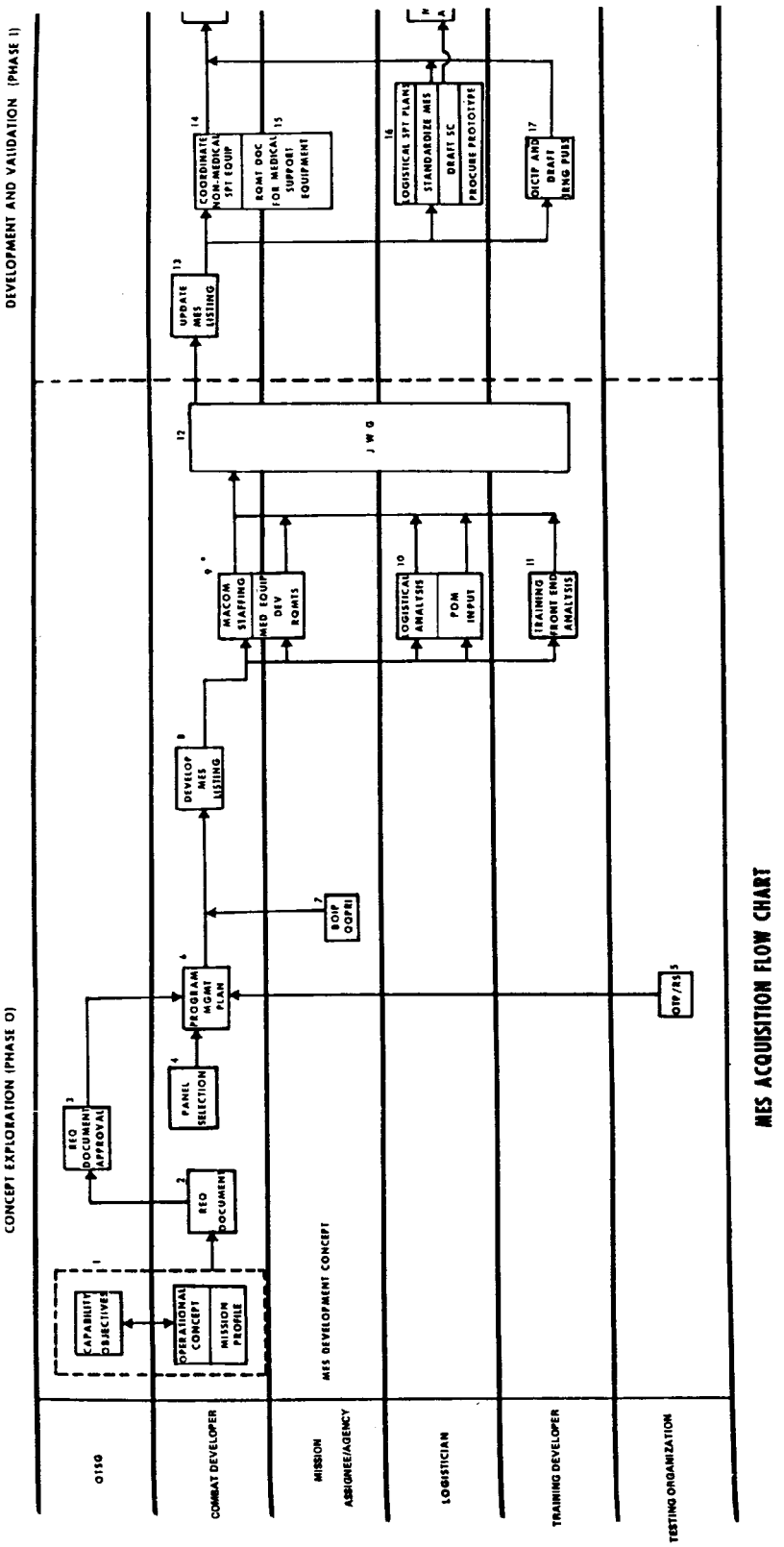

Figure 3-1. NDI Acquisition Model Flow Chart

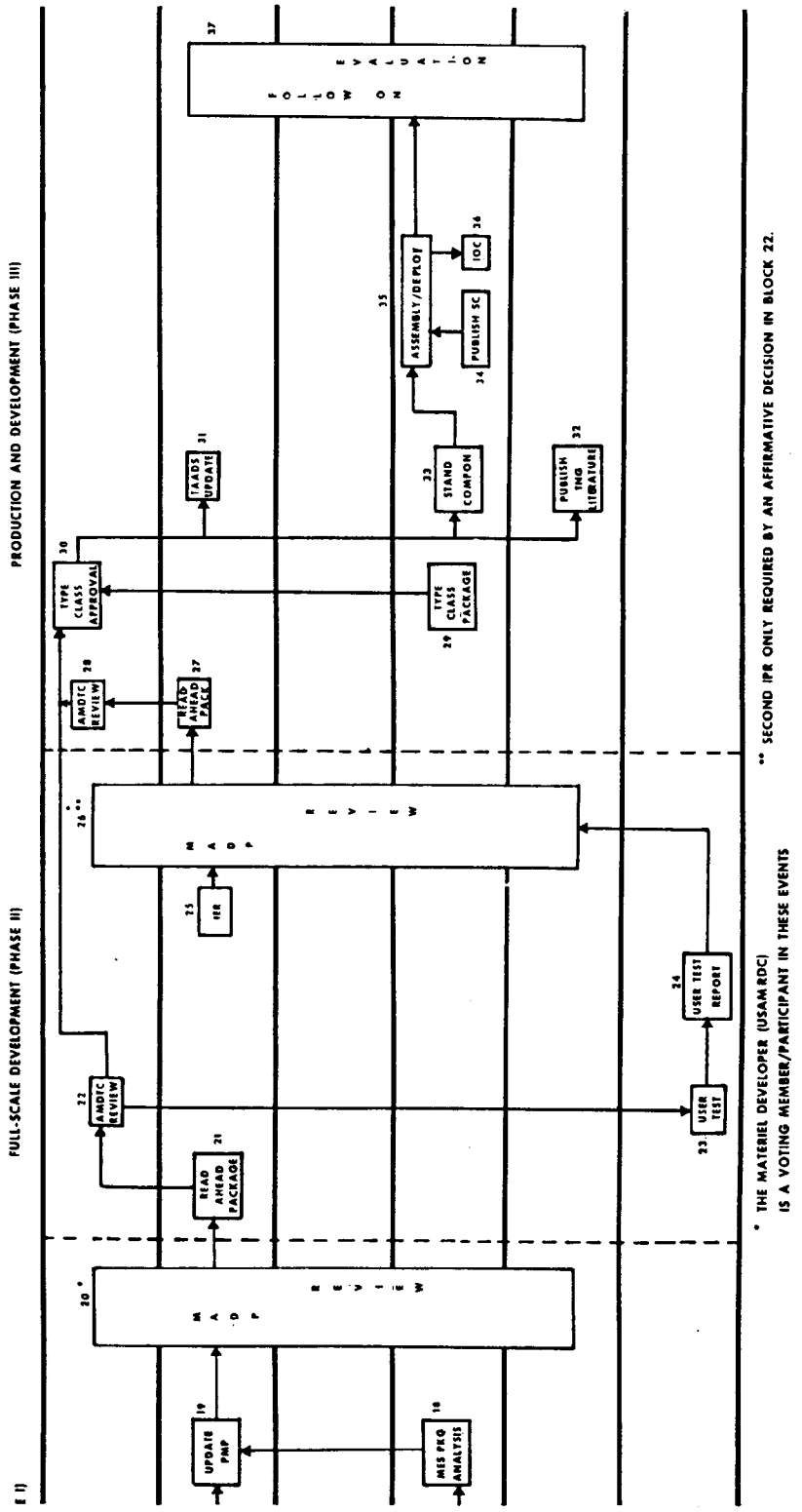

Figure 3-1. NDI Acquisition Model Flow Chart—Continued

Section III
PRODUCT IMPROVEMENT PROGRAM (PIP)

3–11. General.

a. Product improvement (PI) is a formal process by which medical field equipment in the operational inventory is modified to-

(1) Satisfy user requirements,

(2) Meet approved performance specifications,

(3) Correct equipment deficiencies, or

(4) Improve RAM characteristics of the system.

b. Also, certain actions exist in performing nonmandatory modifications outside the normal product improvement channels. (For criteria and procedures for performing these types of modifications, see AR 750-10.) These types of modifications include-

(1) Special purpose modifications.

(2) Special mission modifications.

(3) Minor alterations.

(4) Logistics attrition.

c. Current policy accepts a wide range of equipment change actions under the PIP. Efforts commonly referred to as conversions, retrofits, modernizations, and reconfigurations are included. Normally, an action will be accepted as a PIP candidate if it clearly demonstrates that it meets the criteria outlined in AR 70-15.

d. The P1 of existing medical field equipment is emphasized as the preferred alternative to acquisition of replacement equipment by new development. Cost and operational effectiveness analysis (COEA) conducted to determine the relative cost, effectiveness, and worth of competing alternatives will include consideration of P1 alternatives.

3–12. Categories of PIP actions.

The categories of PIP actions are defined, and a management model is provided in AR 70-15. Significantly revised PIPs require rejustification and approval similar to New Start PIPs.

3–13. Procedural responsibilities.

The procedural responsibilities of the various PIP proponent agencies within the AMEDD, the Defense Personnel Support Center (DPSC), as the tri Service national inventory control point (NICP) for medical materiel, the Defense Medical Materiel Board (DMMB), and DARCOM are defined as follows:

a. CG, US Army Medical Research and Development Command (CG, USAMRDC). CG, USAMRDC, as the materiel developer for all PIP actions involving medical field equipment, will exercise overall management and coordination responsibilities for the conduct of such actions. Specifically, CG, USAMRDC will-

(1) Perform the initial screening of PIPs in coordination with the logistician, the combat developer, the training developer, the DPSC, the DMMB, and OTSG professional consultants.

(2) Perform cost versus benefit studies to determine the fiscal viability of proposed PIP actions; use information provided by other involved agencies.

(3) Chair the Configuration Control Board (CCB), which makes recommendations within AMEDD as to whether PIP actions will be forwarded to CG, DARCOM for approval at the PIP Joint Review.

(4) Receive and disseminate funding authorization documents from DA in the case of New Start or Late Start PIP actions. In the case of urgent P1 category actions, arrange to reprogram funds as required: corporately plan and program requirements with other responsible MEDMAP participants.

(5) Conduct and chair all associated IPRs for PIP actions.

(6) Provide representation at the PIP Joint Review.

(7) Conduct all engineering research involved in a certain PIP action.

(8) Perform a technical feasibility test (TFT) as part of the initial PIP screening process to verify the validity of the initial requirement and to determine a technically viable modification to correct the deficiency. For requirements deemed valid, CG, USAMRDC will prepare a modification proposal consisting of a technical approach, test plan. cost estimate, and a proposed modification schedule.

(9) When funds are identified, design and fabricate a prototype model of the modified equipment.

(10) Provide an updated version. in draft form. of specifications and manuals for the item of equipment as modified, as well as all drawings required to effect the modification.

(11) Perform development testing of the modified item.

(12) Perform the independent evaluation required of development test results for completed PIP actions.

(13) Provide all documents produced by the above actions for incorporation into a data package supporting the final IPR.

(14) Prepare and forward to CG, TRADOC through established channels, an amended FQQPRI on the product-improved item of equipment. This will allow CG, TRADOC to address changes in MOSs, numbers of personnel required as operators and in maintenance units, and grade structure of operators and maintainers.

b. Commandant, Academy of Health Sciences (Comdt, AHS). As the combat developer and tester for all PIP actions involving medical field equipment, Comdt, AHS will perform the following functions:

(1) Examine the validity of each proposed modification with respect to its impact on doctrine, training, and combat effectiveness. Establish a position on whether the action should be performed and submit this position to the CCB for decision.

(2) Determine whether a proposed modification will be considered 'test significant' or 'test nonsignificant' according to AR 70-15.

(3) Conduct OT of the completed modification: arrange for independent evaluation of the OT test results unless waiver is justified.

(4) Provide representation on the CCB.

c. Commander, US Army Medical Materiel Agency (Cdr, USAMMA). As the logistician, Cdr, USAMMA will perform the principal logistics functions below in regard to PIP actions:

(1) Take part in the initial complaint screening by determining the issue status of affected items. During later processing of PIP candidates, assess the impact of modification on the existing Army inventory: develop an agency position on the advisability of modification. Present the data and recommendations to the CCB for consideration in determining whether or not to proceed.

(2) Upon completion of the engineering and test phases of a certain PIP action-

(a) Fund for the acquisition of modification parts.

(b) Monitor the acquisition of the parts.

(c) Manage the control of modification actions in the field.

(d) Share this responsibility or coordinate it with DPSC in situations involving Defense Logistics Agency (DLA) depot assets.

d. Defense Medical Materiel Board (DMMB). The DMMB provides logistics input into the initial screening process when standardized or tri Service items of equipment are involved. In those instances, the board will assess the impact of modification on the inventory and will seek tri Service concurrence for a modification when appropriate.

e. Commander, Defense Personnel Support Center (Cdr, DPSC). The Cdr, DPSC will-

(1) Participate in the review and decision process as an observer.

(2) Acquire modification kits and determine the logistics support level when the modification for DLA-owned assets will be accomplished; for example, in-house or by Government contract.

f. Commanding General, US Army Materiel Development and Readiness Command (CG, DARCOM). DARCOM is the Secretariat for the PIP Joint Review. The CG, DARCOM will approve PIPs.

3–14. PIP processing.

a. Medical materiel PI proposals will undergo an initial screening to determine combat effectiveness and logistics impact of the proposed change. A technical evaluation will also be performed to determine the viability of the proposed corrective action. The conclusions reached in the initial screening process are submitted to a CCB, chaired by CG, USAMRDC (AR 70-37), who will determine acceptance of a proposal as a PIP action. One of the functions of the CCB will be to determine that resources are available to complete the effort and that new funding can be made available either through HQDA or through reprogramming.

b. If the proposal is accepted, the PIP documentation package will be entered into the appropriate processing cycle as outline in AR70-15.

c. Emergency safety modifications of field medical equipment made by field commanders will be reported to the Cdr, USAMMA, ATTN: SGMMA-RO, Fort Detrick. Frederick, MD 21701, as soon as possible but NLT 30 days after the modification. The Cdr, USAMMA will advise the CG, USAMRDC, who will document the PIP to cover safety modifications to change the remainder of the inventory.

3–15. PIP documents.

a. The PIP package will contain all information pertinent to the decision making process, but as a minimum will contain those documents cited in AR 70-15, chapter 3.

b. The PIP package will normally be held on file within USARMRDC unless it is called forward during the HQDA approval/funding cycle.

3–16. Product Improvement Management In formation Report (PRIMIR) (DA Form 3701-R).

a. The PRIMIR is a two-page display of information intended to provide an executive summary of a PIP. It will be filled out and submitted for review in accordance with AR 70-15, chapter 3.

b. Off-cycle PRIMIRs will be submitted to DARCOM within 30 days of the start of any modification activity.

c. An information copy of all PRIMIRs will be forwarded to the Cdr, USAMMA, ATTN: SGMMA-RO, and to HQDA (DASG-HCL).

3–17. Master PRIMIR.

a. A Master PRIMIR provides a 'roll-up' of funding information for each system or major end item for which more than one PIP has been prepared. Masters are not required on items having only one PIP in progress.

b. The CG, USAMRDC will provide the DARCOM PI Branch a summary of all PIP actions within AMEDD for each fiscal year . This summary will normally be in the Master PRIMIR format.

3–18. AMEDD PIP approval.

The AMEDD PIP approval process will adhere to AR 70-15.

3–19. PIP testing.

a. PIP testing will be conducted according to AR 70-15, chapter S.

b. PIP testing, besides demonstrating the ability to meet technical, training, logistics, support and operational requirements, will verify that the technical operational support, safety, health, and human engineering characteristics identified in previous performances have not been degraded by application of the improvement.

3–20. Test funding.

See this regulation, chapter 4, and AR 70-15.

Section IV
SPECIALIZED PROGRAMS

3–21. Medical equipment sets (MESs).

a. Methodology. The policies and procedures prescribed in this regulation establish the methodology by which MESs will be revised or new MESs developed. The detailed management structure (app C and fig 3-2) addresses the entire process: The Concept and Exploration Phase, the Demonstration and Validation (DVAL) Phase, the Full-Scale Development (FSD) Phase, and the Production and Deployment Phase. The process in Appendix C has been structured to accommodate the TRADOC review cycle for the TOE supported by the MESs.

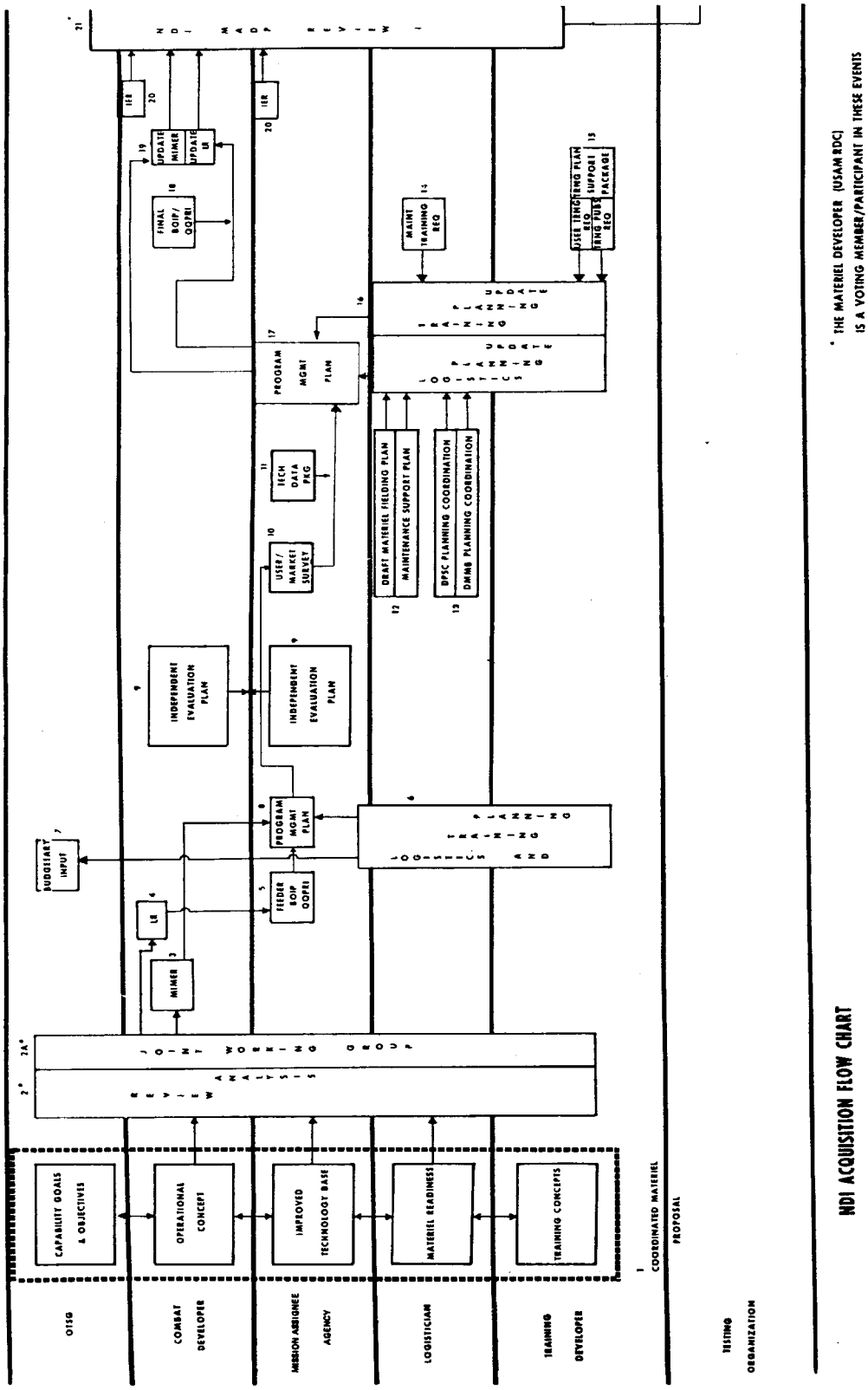

Figure 3-2. MES Acquisition Flow Chart

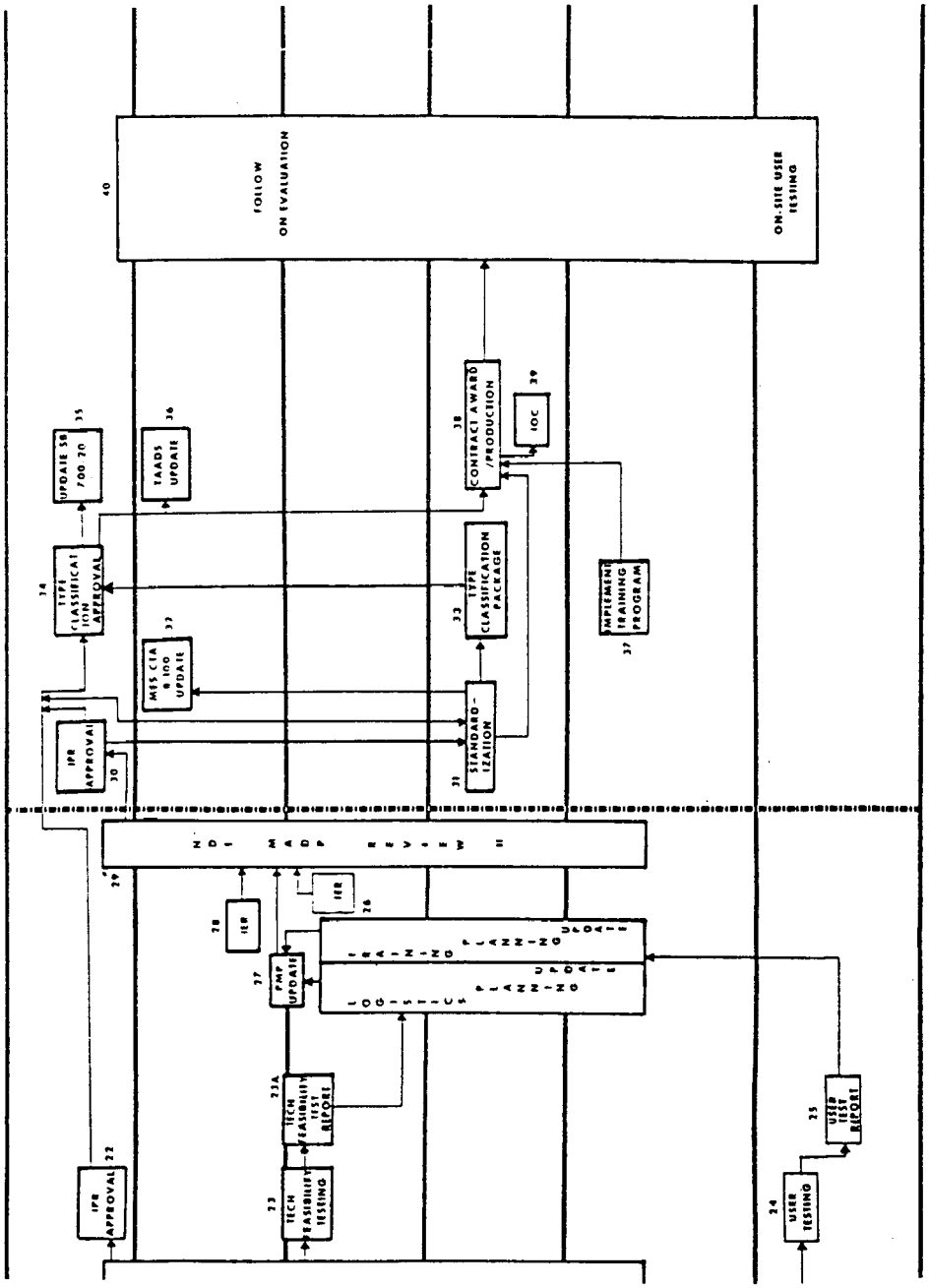

Figure 3-2. MES Acquisition Flow Chart—Continued

b. Components of an MES. An MES consists of medical and nonmedical items including

(1) Expendable (consumable) supplies.

(2) Durables.

(3) Nonexpendable equipment costing less than $3,000, developed to support a certain TOE mission or clinical function.

c. Materiel requirements for components. The materiel requirements for MES components will be derived from an automated modeling technique maintained and operated by the combat developer (AHS). Types and quantities of materiel will be based on-

(1) Workload by patient condition.

(2) Volume of patients projected for types of units or level of medical support.

d. Cyclic and annual reviews. The development of new, as well as the revision of existing, MESs will be accomplished within the time frames set for the cyclic review of current published TOEs and the submission of any draft plan TOE (DPTOE) to CG, TRADOC. The overall program and priorities for developing MESs will be reviewed annually, documented by the AMEDD PRIPROG. and approved by the AMDTC.

e. Out-of-cycle changes to MESs. The AHS will, upon direction from TSG, initiate actions to accomplish major changes to MESs that may be required at times other than that prescribed in the 3-year cyclic review process. Major out-of-cycle changes (development efforts) to MESs will be restricted to those needed to-

(1) Support significant changes in field medical support doctrine and medical force structure, or

(2) Accommodate programming requirements involving management of-

(a) Prepositioned war reserve materiel requirements (PWRMR).

(b) Prepositioned oversea materiel configured to unit sets (POMCUS) stocks.

f. Component changes. Minor changes involving specific components of an MES arising as a result of materiel proposals from the field, evolving medical technology, or proposals for deletion and/or replacement will be submitted to AHS for review. These changes will be retained for the next scheduled cyclic review of the MES.

g. Funding. Policies and procedures related to funding for MES acquisition are contained in chapter 4.

3–22. Acquisition of minor medical equipment.

a. A Minor Medical Equipment Requirement (MIMER) is an AMEDD requirements document prepared by the combat developer and coordinated with the materiel and training developer as well as the mission assignee or logistician. It is a subcategory of the NDI process discussed in paragraph 3-9. The MIMER process addresses those requirements pertaining to low-dollar items (less than $3,000 unit cost) that are not considered readiness significant, but are commercially available. These items, thereby, require only an abbreviated evaluation process for logistical and training supportability considerations before standardization by the DMMB. Items meeting the criteria for acquisition under MIMER require standardization but are exempt from type classification. These items will be authorized as CTA 8-100 items or components to medical sets, kits, and outfits. MIMER items do not include those items that must be acquired for test and evaluation (T&E) by RDTE funds. Candidate items will undergo only as much T&E as needed to assure acceptability of the item for entry into the operational inventory and adequacy of logistic support resources. MIMER items will not be programmed, budgeted, or funded as separate entities by HQDA.

b. As a minimum, the MIMER document contents and format will include -

(1) Nomenclature (including essential characteristics).

(2) Statement of need with justification.

(3) Basis of issue (as a component to a MES or entry in CTA 8-100).

(4) Logistical requirements (including ILS, RAM and NET).

(5) Sources of supply.

(6) Training requirements.

(7) Cost assessment.

c. Procedures for processing MIMER items are discussed in detail in appendix B.

3–23. Training Device Requirements (TDRs).

TDRs will be initiated and processed according to AR 71-9.

Chapter 4
FUNDING

Section I
INTRODUCTION

4–1. General

a. Army medical commands and agencies will program and budget funds consistent with -

(1) Other applicable Army regulations.

(2) Their respective mission responsibility for research, development, modification, product improvement, testing, evaluation, training, or acquisition for fielding.

b. AR 37-100-XX, revised annually, may supersede the guidance in this chapter.

4–2. Concept

a. To initiate the acquisition process, and field a system in a timely manner, funds must be programed, approved, and made available to responsible AMEDD commands and agencies when needed. The combat developer, training developer, materiel developer, and logistician should identify and document requirements early, using the best available data and techniques in developing estimated. This early review increases the probability that funds will be available to start new acquisition efforts at minimum expense to other development programs. Once programs are initiated, the materiel developer should coordinate with the logistician, training developer, combat developer, and tester to prepare the Program Management Plan (PMP). The PMP provides information to plan and program funds that must be synchronously available to meet planned decision milestones, including operational tests and fielding.

b. Augmenting this basic concept is the research effort through In-House Laboratory Independent Research (ILIR), engineering development, and studies conducted by the materiel developer that lead through new materiel proposals to jointly authenticated requirement documents. The programing and budgeting required for PI or modification of equipment also augments life-cycle funding.

c. A COEA will be prepared for each medical system requiring HQDA IPR approval, according to AR 71-9, chapter 10.

Section II
FUNDING FOR FULL-SCALE DEVELOPMENT

4–3. Concept Exploration Phase funding.

a. During the Concept Exploration Phase, CG, USAMRDC will plan, program, and budget RDTE (Research (6.1)) funds to conduct scientific studies and experiments directed toward increasing knowledge, understanding, and insights into identified Army mission-related problems. Technology base (6.1), Single Project Funding (SPF), and ILIR funds will be programed and justified by laboratory commanders and approved through an established program and budget process involving RDTE appropriation funds.

b. The CG, USAMRDC will program and budget RDTE funds (6.2) for exploratory research and Single Program Element Funding (SPEF) to investigate fundamental applied research, experimental prototype hardware; and conduct studies to evaluate feasibility, practicality, and establish functional parameters. Technical feasibility tests (TFTs) are legitimately funded from this source. The source documents used to program and budget are the financial part of the laboratory program plan for basic research, (6.1) SPS and exploratory development; and (6.2) SPEF. For advanced development (6.3) and engineering development (6.4), the source document will be the financial plan contained in section III of the program management plan (AR 70-1).

c. The principal objective of SPF/SPEF funding is the maintenance of the technologic base; however, CG, USAMRDC will use ILIR (AR 70-55) to structure a responsive research program.

d. Hardware development, nonmateriel technologic prototypes or techniques for experimental or operational tests will be funded by the CG, USAMRDC out of the RDTE appropriation (6.3A and 6.3B). As a general rule, 6.3A funds provide the development of experimental demonstrators in the Concept Exploration Phase.

e. The Comdt, AHS through the CG, HSC will plan, program, and budget OMA funds to conduct Force Development Testing and Experimentation (FDTE), operational feasibility testing (OFT), including innovative testing, and on-site user tests (OSUTs); and RDTE funding to support operational testing and the CEP, consistent with the milestones established in the approved PMP.

f. The Cdr, USAMMA will input to the PMP those resources associated with procurement in fielding and maintenance support. These resource requirements will also be provided to OTSG for preliminary programming and budget development. The source document for the PMP for procurement for the inventory is The Army Equipment Distribution Plan (TAEDP). In addition to procurement costs, the PMP will also serve as the source document used to plan and program other resources required to accommodate fielding.

4–4. Demonstration and Validation Phase and Full-Scale Development Phase funding.

a. The CG, USAMRDC will prepare and update the PMP for medically related items, and coordinate with other agencies on those items of nonmedical materiel. The PMP provides a basis for funding requirements for OT, and all other events to include production post production tests. TMDE, repair parts, and acquisition fielding. Responsible AMEDD agencies will use those PMP to determine funding sources and mission assignments to accomplish the goals of the approved PMP.

b. The CG, USAMRDC will program and budget RDTE 6.3B and 6.4 for the Demonstration and Validation and the Full-Scale Development Phases to develop and test advanced development and engineering development prototypes. Funds programmed for advanced development prototypes (6.3B) will be used to confirm technical feasibility or fabrication for competitive evaluation.

c. Engineering development prototypes will be funded with RDTE 6.4 to assure engineering problems have been solved and support a thorough evaluation of the system.

d. The Comdt, AHS, through the CG, HSC, will identify, funding requirements for operational tests (OT I, OT II) conducted during these phases. During meetings of the TJWG and preparation of the CTP, the USAMRDC and AHS representative will insure that funding is consistent with the PMP to support operational tests. The Comdt, AHS will submit the agency's annual RDTE funding requirements for operational testing through the CG, HSC to the OTSG. The OTSG will coordinate these requirements with the CG, USAMRDC. The CG, USAMRDC will program and budget these requirements. Responsibilities for funding OT are outlined in AR 70-10 and AR 71-3.

e. The Cdr, USAMMA will refine costs associated with acquisition, TMDE, repair parts, and fielding. Updates to the OTSG will be provided as necessary.

4–5. Production and Deployment Phase programming. budgeting, and funding.

a. Programming and budgeting for DT IIa/OT ha conducted during the Production and Deployment Phase will be consistent with paragraph 4-4 above.

b. The Cdr, USAMMA will assure that requirements for OMA, OMAR. OMANG or OPA funds needed to field newly acquired systems are identified and provided to OTSG for programming and budgeting purposes consistent with established milestones.

Section III
FUNDING FOR OTHER PROGRAMS AND ACQUISITION ALTERNATIVES

4–6. Product Improvement Program (PIP) funding.

a. Funding of approved PIP actions will be in accordance with AR 70-15, chapter 4.

b. The CG, USAMRDC will-

(1) Establish funding associated with PI and documented on DA Form 3701-R (Project Proposal Improvement Project).

(2) Determine funding requirements for engineering and PIP testing according to AR 37-100-XX, as appropriate.

(3) Coordinate with the proper agency to carry out the program.

c. The Cdr, USAMMA will assure that OMA, OMAR, OMANG, OPA, or stock fund requirements are developed and provided to the OTSG. The OTSG will-

(1) Program and budget funds required to purchase and install modification kits.

(2) Coordinate this funding action with USAR and ARNG when appropriate.

d. Hardware development, nonmateriel technologic prototypes, or techniques for experimental or operational tests will be funded by the CG, USAMRDC from advanced development (6.3A and 6.3B) RDTE funds. As a general rule, 6.3A funds provide the development of experimental demonstrators in the Concept Exploration Phase.

4–7. Nondevelopment item (NDI) funding.

a. The mission assignee agency will develop requirements for funds for the acquisition of NDIs as described in AR 70-1.

b. Funds used to conduct operational tests, when required, will be determined by the Comdt, AHS.

c. The Cdr, USAMMA will develop requirements and the OTSG will coordinate the programming and budgeting from the proper appropriation, OPA, OMA, OMAR, OMANG, or stock fund, to stock and field NDI-Type materiel. Funds will be programmed and budgeted by the Cdr, USAMMA from the procurement appropriation to obtain a replacement for a standard or an adopted item with a unit price in excess of $3,000. If the cost is less than $3,000, then OMA, OMAR, or OMANG funds will be used when appropriate.

4–8. Test funding.

Funding for testing will be developed according to AR 70-10, AR 71-3, and AR 37-100-XX, as appropriate. (See table 4-1.)

4–9. Training literature and logistics publications.

a. DA-wide training literature arid logistics publications will be prepared and submitted according to AR 310-3.

b. Funding required to prepare and publish command- or agency-level training literature and logistics publications will be programmed by respective commands and agencies.

4–10. Training devices and simulators.

The cost of developing and acquiring training devices and simulators needed to permit establishment of a training capability necessitated through development or configuration change will be according to AR 71-9.

4–11. Funding of MESs.

The Cdr, USAMMA, as the mission assignee agency commander, will develop requirements; the OTSG will coordinate the programming and budgeting from the proper appropriation OMA, OMAR, OMANG, or stock fund for procurement of prototype MESs as well as for stockage and fielding of MESs.

Table 4–1
Funding for Testing

	HSC/AHS	USAMRDC	NICP/USAMMA
Developmental test I, II		RDTE	
Developmental test IIa			
Preproduction prototypes		RDTE	
Items scheduled for procurement by the Army Stock Fund		OMA	
Technical feasibility test (TFT)		RDTE	
Product Improvement Program (PIP) testing		RDTE	
Operational Test (OT) I, II	RDTE	RDTE	
OT IIa, OSUT, OFT	RDTE	RDTE	
Items tested before production decision			
Items tested after production decision resulting from OT II	OMA		Loan
Force Development Test and Experimentation (FDTE)	OMA		
Joint OT			
Items tested before production decision	RDTE		
Items tested after decision	OMA		
Follow-on evaluation (FOE)	OMA		
Concept Evaluation Program (CEP) testing	RDTE		OMA OPA

Chapter 5
TEST AND EVALUATION

5–1. General.

a. This chapter prescribes the policies and procedures used to plan, conduct, evaluate, and report on-

(1) Test and evaluation (T&E) of medical materiel systems or items.

(2) Types of T&E performed.

(3) Responsibilities of the AMEDD materiel developer, combat developer, training developer, operational tester, and other Army organizations in the T&E process.

b. Testing in support of MEDMAP, and in the evaluation of medical sets, kits, and outfits, will be planned and conducted in accordance with policies and procedures outlined in basic Army regulations as supplemented in this regulation.

c. The process described is typical, but exceptions may occur and are encouraged when the materiel acquisition time or cost can be lowered without increasing the risk.

5–2. Responsibilities.

The primary agencies involved in AMEDD T&E are USAMRDC, AHS, HSC, and USAMMA. CG, USAMRDC. as the materiel developer, is responsible for development T&E, and initial production testing (IPT). Comdt, AHS is responsible for all operational or user T&E. CG, HSC is responsible for programming, budgeting, and assuring funding support for AMEDD-originated T&E, and providing qualified AMEDD consultants and on-site test advisors to the test organization to assist with planning, execution, and reporting. Cdr, USAMMA, as mission assignee for nondevelopment items, is responsible for coordinating technical feasibility testing, if required, for nondevelopment items.

5–3. Objectives.

T&E will be conducted as early as possible and throughout the MEDMAP to-

a. Demonstrate how well medical materiel meets technical and operational requirements.

b. Provide data to assess developmental and operational risks for decision making.

c. Verify that technical, operational, and support problems identified in previous testing have been corrected.

d. Insure that all critical issues to be resolved by testing have been adequately considered.

e. Verify that safety, health, and human factors design requirements are met.

f. Provide validated operator and annual maintenance man-hours (AMMH) to combat developers in FQQPRI input.

5–4. Policies.

a. Testing will be conducted only to satisfy approved operational, safety, health, and human factors requirements. Prime considerations in planning the necessity for testing are as follows:

(1) Lowest life cycle cost.

(2) Evaluation of design tradeoff.

(3) Minimizing the total acquisition cycle time.

b. Determinations as to the necessity for testing and scope and type of testing must weigh data requirements against data availability. The criticality, density, and technology of the item in question will be considered.

c. Developmental items will be subjected to DT and OT unless specifically waived by an IPR or TSG.

d. DT and OT may be combined when-

(1) Clearly identified and significant cost and time benefits would result, or

(2) Separation would cause delay involving an unacceptable military risk or increase in acquisition cost.

e. NDIs will normally be subjected to minimal or no government testing when previous test and performance data or user market surveys are considered complete and valid for determining military suitability and logistics supportability.

f. The type of test to be conducted on an MES will be determined based on the following:

(1) Magnitude of changes from the old versus the new MES.

(2) Container transportability factors for the supported TOE.

(3) Medical functional capability of the MES.

(4) Training implications of the new MES.

(5) Estimated impact of the MES on the basic TOE.

g. Testing during the materiel acquisition process consists of development testing and user testing. User testing includes OT, FDTE, FOE, and CEP test.

h. T&E has no time constraints of itself but must conform to the schedule and program plans of the medical materiel system or item to be tested and evaluated.

i. PIP testing and evaluation will be conducted according to AR 70-15, chapter 5; and this regulation, chapter 3, section III.

5–5. Development testing (DT).

a. Development testing is conducted to estimate the item's military utility and to demonstrate that-

(1) The engineering design and development process is complete.

(2) The design risks have been minimized.

(3) The item will meet specifications.

b. This type of testing is conducted to support developed items and NDIs. It is accomplished in the contractor's plant laboratory, or field setting. DT is also used to collect data required to perform health and safety assessments and human factors engineering analyses.

c. TSG responsibility for development testing of medical materiel is performed by CG, USAMRDC. This includes coordination with the Food and Drug Administration (FDA) to acquire proper certification of a drug or medical device.

d. Major types of DT include DT I II, and IIa, as well as engineer design testing and validation testing.

5–6. Concept Evaluation Program (CEP).

a. Principles.

(1) The CEP is an HSC user equipment testing program conducted with command-controlled funds, personnel, equipment, and facilities. CEP tests will be accomplished in response to the PRIPROG and managed by the AMEDD Test Board.

(2) The CEP will be conducted in accordance with this regulation and other applicable directives. Combat developer, materiel developer, logistician, training developer, and test organization roles are essentially the same as for OT.

(3) It may be determined in a Materiel Acquisition Decision Process (MADP) review that user equipment testing is required to address unresolved issues, and testing does not require an operational environment (field conditions with typical troops in a representative TOE troop unit). If so, a CEP will be conducted.

b. Tasks, events, and milestones required to support the AMEDD CEP. See table 5-1.

5–7. Operational testing (OP).

a. Principles.

(1) OT for medical materiel is conducted to estimate the prospective system's-

(a) Military use.

(b) Operational effectiveness and suitability.

(c) Safety, health, and human factors effectiveness.

(d) Need for modifications.

(2) OT also provides information on-

(a) Organization.

(b) Personnel requirements.

(c) Doctrine.

(d) Tactics.

(e) Verification of associated training programs.

(f) Operating instructions.

(g) Publications.

(h) Handbooks.

(i) The system support package.

(3) OT will be accomplished by operational and support personnel of the type and qualification of those expected to use and maintain the item system when deployed.

(4) OT will be conducted in as realistic an operational environment as possible within controlled field exercises and to the maximum extent possible. TOE troop units and maintenance support personnel in tactical scenarios will be used.

(5) It may be determined in an MADP review that testing is required to address unresolved issues (related to NDIs or developed items), and the testing requires an operational environment. If so, OT will be conducted.

b. Tasks. events, and milestones required for OT. See table 5-1.

5–8. Combination of DT and OT.

Every attempt is made for DT and OT to share data and avoid duplicative testing. DT and OT may be combined or integrated when separation causes unacceptable delay or an unacceptable increase in acquisition costs. When DT and OT are combined, the agencies responsible for the conduct of testing of medical materiel will insure that the combined DT and OT is so planned and executed that necessary DT and OT information is provided. Combined DT and OT may be dictated when it is necessary to share such resources as a limited number of test items, instrumentation and operating personnel, facilities or other test support resources. DT and OT test designs are prepared, and test results are evaluated independently, regardless of the degree of combined testing.

5–9. Force Development Test and Experimentation (FDTE).

a. Principles.

(1) FDTE is performed to support the combat development, training development, force development, and materiel acquisition process. In FDTE the impact, potential, and effectiveness of selected concepts, tactics, doctrine, organization, and materiel are examined. Tests range is scope from small, highly instrumented and high-resolution field experiments to large, less-instrumented, low-resolution but still controlled scenario field tests. Tests support the materiel acquisition process by providing data to assist in establishing the ROC or LR. FDTE further develops fundamental data necessary for a full understanding of the performance of a materiel system, and assists in validating doctrine or tactics to counteract response to a system once deployed.

(2) FDTE provides the AMEDD with a method of testing issues that require testing in an operational environment. TOE units will normally perform FDTE in as realistic an environment as possible, using qualified operational personnel and equipment.

(3) A designated test organization will conduct the FDTE according to AR 71-3 and other appropriate directives.

(4) HQDA, TSG, or any command or agency may direct proposals for FDTE.

b. Tasks and events required to support FDTE. See table 5-2

5–10. Test funding.

Funding for testing is outlined in chapter 4 of this regulation.

Table 5–1
Summary Test Matrix (less FDTE)

Test or evaluation document or event	Responsibility	Input/Review/Participation	Milestones
Independent evaluation plan (IEP)	Combat developer	Operational tester Materiel developer/ Mission assignee (3) Test organization Training developer Logistician	Beginning of each phase of MAP
Outline test plan (OTP)/Resume sheet (RS)	Test Organization	Combat developer Materiel developer Mission assignee (3) Training developer (1)	Following IEP approval
Coordinated test program (CTP)	Materiel developer/Mission assignee (3)	Combat developer Test organization Training developer Logistician	Beginning of each phase of MAP
TSP, OTRS/TRS (2), EIA/EIS, safety release	Material developer/Mission assignee(3) Combat developer Training developer		As required by OTP/RS
Test plan	Test organization	Combat developer Training developer Materiel developer Mission assignee (3) Logistician	As required by OTP/RS
Pretest activity and conduct test	Test organization	Combat developer Materiel developer/ Mission assignee (3) Training developer Logistician Test unit	T—30 to T—1 for pretest activity, and T to T + X for conduct of test
Test report	Test organization	Combat developer Training developer Materiel developer/ Mission assignee (3) Logistician	As required by OTP/RS
Independent evaluation report (IER)	Combat developer	Operational tester Test organization	As required by OTP/RS

Notes:

[1] Ideally, the OTPs and RSs for OT will be submitted so as to permit publishing in the FYTP at T—12 months or earlier. CEP RS must be approved by HSC 60 days before the earliest milestone date in the RS.

[2] OTRS for OT; TRS for CEP.

[3] If the item to be tested is developmental, the materiel developer has responsibility. If the item to be tested is an NDI, the mission assignee is responsible.

Table 5–2
FDTE matrix

Test or evaluation document or event	Responsibility	Input/Review/Participation
Independent evaluation plan (IEP) Outline test plan (OTP) Resume sheet(RS)	Test proponent/combat developer (1) Test organization	Operational tester/test organization
Test support package (TSP)	Test proponent/combat developer	Same as above
Test design plan (TDP)	Designated test organization (2)	Combat developer Trainer Materiel developer
Detailed test plan (DTP)	Designated test organization (2)	Same as above
Conduct test	Test organization	Same as above plus test unit
Test report	Test organization	Combat developer Trainer Materiel developer
Independent evaluation report (IER)	Test proponent/combat developer (1)	Operational tester Test organization

Notes:

[1] AHS as test proponent is normally the command originating the requirement for test data. The test proponent has functional responsibility for evaluation and analysis of resultant FDTE test information.

[2] When TRADOC Combined Arms Test Activity (TCATA) is the designated test organization for FDTE, the OPT will be prepared by TCATA.

Chapter 6
TRAINING

6–1. Scope.

This chapter-

a. Describes the role of the training developer (AHS) within the medical materiel acquisition process.

b. Describes the integration of training development, as an integral component of the overall materiel acquisition process, and the integration of the developing systems into ongoing training programs.

c. Provides the framework upon which a planning and management system for training subsystems can be established.

6–2. Training development process.

The individual and collective training plan for developing systems sets forth the sequence that describes the functional relationships between training development tasks and the PMP to support materiel acquisition requirements. This regulation will be used as a guide by the AMEDD to accomplish the training development PMP responsibilities . It must be modified as appropriate to accommodate the complexity, cost evaluation, equipment availability, and development decisions of a program.

6–3. Training concepts and plans.

a. Proposed training concept.

(1) During the Concept Exploration Phase of the materiel acquisition process, the training developer will form a proposed training concept. The training developer will identify, in general terms-

(a) Who is to be trained.

(b) What skills are to be trained.

(c) When, where, and how training will be accomplished.

(2) The training concept will be formed with only minimal job specific information available. Besides providing a general framework for future training activities, the proposed training concept serves to identify the constraints training requirements and resources may impose on the design of the materiel.

(3) The training concept will serve as a source to conduct a front-end analysis (FEA) on operator high-risk tasks.

b. Development of an outline individual and collective training plan (QJCTP).

(1) The document used to formalize the proposed training concept is the OICTP. The OICTP is developed by the training developer during the development phase. Known training requirements (for example, introduction, operator, maintenance, resident, unit, and extension) will be included.

(2) Normally, in the early stages of the acquisition process, a great amount of detail is not available. The OICTP, as a minimum, will consist of-

(a) Training strategy.

(b) Training concept.

(c) Initial resource estimates envisioned for the system.

(3) Training issues and high-risk operator tasks requiring extension training materiel (ETM) will be identified. The OICTP will be used by the mission assignee agency, materiel developer, and contractor as one input for conduct of an FEA to identify high-risk operator maintenance tasks. The OICTP should also contain as much of the other details as are available.

(4) The OICTP is used to develop data for the training analysis for a COEA, which be comes part of the support documents for the requirements document decision.

(5) The refined training plan. an updated OICTP. is based on the results of the FEA and is tentatively validated during DT/OT I.

(6) The AHS is responsible for staffing of the OICTP with other MEDMAP participants and interested TRADOC schools.

c. Individual and collective training plan (ICTP).

(1) Based on the results of DT/OT I, an ICTP will be prepared and submitted with the requirements document (ROC or LR). The ICTP provides all participants in the MEDMAP with-

(a) A management tool to insure a complete training package is developed.

(b) A reference document for use in preparing and supporting the basic system decision-making, programming, and planning sequences.

(2) The ICTP identifies the elements of the training subsystem that are developed separately but must be coordinated and available for testing and validation in draft, storyboard materiel, or brassboard configuration during OT II. The goal is to have a complete, validated training package available at FUED.

(3) The ICTP, when implemented, supports development of new, and changes to current, individual training plans (ITPs) and collective training programs at both the AHS and the unit level. The ICTP is not an authorization document.

When approved, however, the ICTP is sufficient justification to enter manpower and funding requirements into the programming and budgeting processes.

(4) The training developer will incorporate all of his or her needs, participating TRADOC school/center and agency needs, and materiel developer training requirements. The NET Plan is prepared by materiel developer and mission assignee agency in coordination with the training developer and will be included in the ICTP.

(5) The training developer will follow the OCTP format for OICTP and ICTP preparation and submissions; however, only those paragraphs and appendixes applicable to the materiel system under development will be used. In addition to the basic plan, appendixes will be added to support subparagraphs as appropriate.

d. Development of an OICTP/ICTP. Development of an OICTP/ICTP must be accomplished together with development of the other supporting subsystems. This is particularly critical in the case of the logistics package (ILS) as outlined in AR 700-127 and DA Pam 700-127.

e. Limited training impact. New equipment having limited training impact does not require an OICTP/ICTP.

f. NDIs and military adopted commercial items. In the case of NDIs and military adopted commercial items (MACIs), an ICTP will be prepared for staffing at the same time as the requirements documents. The ICTP for these types of acquisition will, by necessity, be updated more frequently. This cycle must be based on the availability of the materiel item and its supporting documents.

g. Training input. MIMER and MES requirements documents will be reviewed by the training developer for training input. When development of training is required, the process outlined in appendix C will be applied.

h. Training development process . Throughout the training development process, the training developer must insure that-

(1) Training in the proper use of personal protective procedures and equipment to prevent or control exposure to identified health hazards be incorporated into test plans.

(2) User training requirements regarding personal protective procedures and equipment to prevent or control exposure to identified health hazards be incorporated in proper-

(a) Operator and maintenance publications.

(b) Soldier's manuals.

(c) POIs.

(d) Other training literature.

6–4. Skill performance aids (SPAs).

a. SPAs are a systematic approach to developing technical documents for operator and maintenance training. SPAs are an integral part of the ILS Program. Their purpose is to insure the fielding of fully supported systems. The key features of this process are-

(1) Systematic analysis of the equipment to identify performance tasks.

(2) Analysis of the tasks to develop step-by-step performance procedures.

(3) Development of full procedures in soldier-tested manuals.

(4) Identification of performance tasks that require supplementary training.

(5) Development of lesson and training management materials to directly support the technical manual (TM).

b. The requirements document contains the initial requirement for SPAs. The first step in this process is the conduct of an analysis. From this analysis the SPAs common foundation of precisely defined performance requirements is derived. This analysis must be made, considering logistic support analysis requirements (LSARs) (MIL-STD-1388-1). The SPAs analysis will provide a task list for each level of maintenance and operator logistical and personnel support requirements. Collective and tactical tasks, a training developer responsibility, will be developed. This aspect of the analysis effort is not a part of the SPAs effort. The integration of these analyses (SPAs and collective/tactical) will provide both materiel and training developers with a complete system task list on which to base training subsystem design.

c. The materiel developer and mission assignee agency will provide a synoptic outline of each TM to be produced and preliminary documents and storyboard training materials for high-risk operator and maintenance tasks. An update of the OICTP will result from this initial validation of the training subsystem. The MOS, skill levels, jobs, and tasks to be taught, using SPAs materiels will be identified. The SPAs package will be provided for OT 1 to include-

(1) Storyboard material (NET) for high-risk tasks.

(2) Materiels to support training of other than SPAs high-risk tasks, to include preliminary tactical training and institutional training (developed by the training developer).

d. The ICTP submitted with the requirements document will include identifiable training requirements to include SPAs and their supportive ETM. Most ETM developed for SPAs will have application for NET, and institutional and nonresident courses. Coordination of this ETM development is essential. Validation of the draft SPAs package, draft or storyboard ETM, prototype system training devices and collective and tactical training will be accomplished at OT II.

6–5. Cost and training effectiveness analysis (CTEA).

A CTEA is a systematic, continuous evaluation process conducted during the acquisition cycle of a hardware-oriented system. This system focuses on training subsystem development and training inputs to the COEA. A CTEA is required during all phases of the materiel acquisition process to provide decision makers with the data needed to support an IPR decision to move to the next stage of development. The training developer is responsible for the CTEA development.

6–6. Testing of materiel systems.

a. In testing the training subsystem the training developer is primarily concerned with OT in that it assesses the military effectiveness, operational suitability, and training package validity of a prospective system. An FDTE will be used to gather data on training, logistics, personnel, etc., before or after an OT, if necessary.

b. During user testing, the training developer will-

(1) Provide critical training test issues and associated test criteria to the combat developer for inclusion in the independent evaluation plan (IEP). Provide similar input in support of training device testing.

(2) Develop the TTSP for user tests (less OT I) coordinate with the combat developer, logistician. and designated test organization in developing the package.

(3) Provide personnel to attend contractor training or other training for instructor and key personnel, when applicable.

(4) After insuring the test players are trained, develop the training part of the OTRS.

(5) Provide training developer personnel for the test directorate as stated in the approved OTP.

(6) Assist the combat developer in developing the IER.

6–7. Funding for training.

Requirements, responsibilities, and procedures for funding for the training subsystem of the MEDMAP are contained in chapter 4 of this regulation.

Appendix A
REFERENCES

Section I

AR 10–4
(US Army Operational Test and Evaluation Agency). Cited in paragraph 2-1

AR 10–5
(Department of the Army). Cited in paragraph 2-1.

AR 10–41
(US Army Training and Doctrine Command). Cited in paragraph 2-1.

AR 10–43
(US Army Health Services Command). Cited in paragraph 2-1.

AR 10–65
(Defense Medical Materiel Board). Cited in paragraphs 2-1 and B-25a(l).

AR 10–71
(US Army Medical Materiel Agency). Cited in paragraph 2-1.

AR 37–100–XX
(The Army Management Structure) (AMS). Cited in paragraphs 4-lb, 4-6b(2), 4-8, and B-8a(4).

AR 40–61
(Medical Logistics Policies and Procedures). Cited in paragraphs 1-ic and B-25a(2).

AR 70–1
(Army Research, Development, and Acquisition). Cited in paragraphs 1-lb, 3-la, 3-2b, 3-2c, 3-5b(4), 3-10, 4-3b, 4-7a, B-la(1), B-2a(l), B-5a(1), B-8a(1), B-9b, B-lla, B-12a. B-13a(l), B-14a(1), B-15a(l), B-16a(1), B-17a(l), B-18a, B-19a(l), B-20a(l), B-21a(1), B-22a(l), B-23a(1), B-24a(1), B-30a(1), and B-31a(l).

AR 70–10
(Test and Evaluation During Development and Acquisition of Materiel). Cited in paragraphs 2-7h. 2-7q. 2-8f(8), 4-4d, 4-8, B-8a(2), B-17a(2), B-19a(2), B-20a (2), B-21a(2), and B-23a (2)

AR 70–15
(Product Improvement of Materiel). Cited in paragraphs 3-2a, 3-6a, 3-llc, 3-12, 3-13b(2), 3-14b, 3-15a, 3-16a. 3-18, 3-19, 3-20, 4-6a, and 5-4i.

AR 70–17
(System/Program/Project/Product Management). Cited in paragraph B-9a.

AR 70–37
(Configuration Management). Cited in paragraph 3-14.

AR 70–55
(Management of US Army Research and Development Centers and Laboratories). Cited in paragraph 4-3c.

AR 70–61
(Type Classification of Army Materiel). Cited in paragraphs B-27a(1), and B-28a(1).

AR 71–2
(Basis of Issue Plans). Cited in paragraphs 2-5b, 2-7d, 2-9p, 3-9, B-6a(l), B-6b, B-15a(2), B-15b, and C-7.

AR 71–3
(User Testing). Cited in paragraphs 2-8e(5), 4-4d, 4-8, B-8a(3), B-lOa(1), B-19a(3), B-20a(3), B-21a(3), B-22a(2), B-23a(3), B-31a(2), and C-23.

AR 71–9
(Materiel Objectives and Requirements). Cited in paragraphs 3-23, 4-2c, 4-10, B-la(2), B-2a(2), B-3a, B-5a(2), B-7a(1), B-14a(2), B-16a(2), B-24a(2), and C-2.

AR 310–3
(Preparation, Coordination, and Approval of Department of the Army Publications). Cited in paragraph 4-9.

AR 310–34
(Equipment Authorization and Utilization Policies and Criteria and Common Tables of Allowances). Cited in paragraph B-28a(2).

AR 611–1
(Military Occupational Classification Structure Development and Implementation). Cited in paragraphs B-6a(2), B-7a(2), and B-15a(3).

AR 700–127
(Integrated Logistic Support (ILS)). Cited in paragraphs 3-1f, 6-3d, B-7a(3), B-13a(2), B-14a(3), B-22a(3), B-30a(2), B-31a(3), and C-lOa(1).

AR 702–3
(Army Materiel Reliability, Availability, and Maintainability (RAM)). Cited in paragraph 2-9g(1).

AR 708–1
(Cataloging and Supply Management Data). Cited in paragraphs 2-9p. B-6a(3), B-15a(4), B-25a(3), and B-27a (2).

AR 710–60
(Standard Study Number System and Replacement Factors). Cited in paragraph 2-9p.

AR 750–1
(Army Materiel Maintenance Concepts and Policies). Cited in paragraph B-30a(3).

AR 750–10
(Modification of Materiel and Issuing Safety-of-Use Messages). Cited in paragraph 3-11b.

AR 750–43
(Test, Measurement, and Diagnostic Equipment) (Including Prognostic Equipment and Calibration Test/Measurement Equipment). Cited in paragraph 2-9a.

AR 1000–1
(Basic Policies for Systems Acquisition). Cited in paragraphs 1-lb, 3-la, and B-lOa(2).

DA Pam 11–25
(Life Cycle Management Model for Army Systems). Cited in paragraphs 3-3a, and 3-3b.

DA Pam 700–127
(Intergrated Logistic Support Management Model (ILSMM) and Glossary). Cited in paragraphs 6-3d and B-13a(3).

SB 700–20
(Army Adopted/Other Items of Materiel Selected for Authorization/List of Reportable Items). Cited in paragraphs 2-4c, B-27b, C-27, and C-29.

MIL STD 1388–1
(Logistic Support Analysis). Cited in paragraph 6-4b.

Section II
Related Publications

A related publication is merely a source of additional information. The user does not have to read it to understand this regulation.

AR 1–1
(Planning, Programming, and Budgeting within the Department of the Army).

AR 5–5
(Army Studies and Analyses).

AR 10–14
(US Army Inspector General Agency).

AR 15–14
(Systems Acquisition Review Council Procedures).

AR 40–5
(Health and Environment).

AR 70–2
(Materiel Status Recording).

AR 70–6
(Management of the Army Research, Development, Test, and Evaluation Appropriation).

AR 70–31
(Standards for Technical Reporting).

AR 200–1
(Environmental Protection and Enhancement).

AR 310–25
(Dictionary of United States Army Terms (Short Title: AD)).

AR 310–30
(Management System for Tables of Organization and Equipment) (The TOE System).

AR 310–49
(The Army Authorization Documents System (TAADS)).

AR 350–1
(Army Training).

AR 350–35
(New Equipment Training).

AR 381–11
(Threat Support to U Army Force, Combat, and Materiel Development).

AR 385–10
(Army Safety Program).

AR 385–16
(System Safety Engineering and Management).

AR 570–2
(Organization and Equipment Authorization Tables: Personnel).

AR 602–1
(Human Factors Engineering Program).

AR 700–47
(Defense Standardization and Specification Program).

AR 700–51
(Army Data Management Program).

AR 700–120
(Materiel Distribution Management for Major Items).

AR 715–6
(Proposal Evaluation and Source Selection).

AR 725–1
(Special Authorization and Procedures for Issues, Sales, and Loans).

AR 725–50
(Requisitioning, Receipt, and Issue System).

AR 750–37
(Sample Data Collection: The Army Maintenance Management System (TAMMS)).

DA Pam 11–2
(Research and Development Cost Guide for Army Materiel Systems).

DA Pam 70–21
(The Coordinated Test Program (CTP)).

DA Pam 750–21
(Logistic Support Modeling).

TM 38–703
(Integrated Logistic Support (ILS) Management Guide).

TM 38–710
(Integrated Logistic Support: Implementation Guide for DOD Systems and Equipment).

TM 38–750
(The Army Maintenance Management System (TAMMS)).

MIL STD–12
(Abbreviation for Use on Drawings and In Technical Publications).

MIL STD–100
(Engineering Drawing Practices).

MIL STD–280
(Definitions of Item Levels, Item Exchangeability, Models and Related Terms).

MIL STD–470
(Maintainability Program Requirement (For Systems and Equipment)).

MIL STD–471A
(Maintainability Verification/Demonstration/Evaluation).

MIL STD–785
(Reliability Program for Systems and Equipment Development and Production).

MIL STD–881
(Work Breakdown Structure for Defense Materiel Items).

MIL STD–882
(System Safety Program for Systems and Associated Subsystems and Equipment: Requirements for).

MIL STD–1388–1
(Logistic Support Analysis).

MIL STD–1388–2
(Logistic Support Analysis Data Element Definitions).

MIL STD–1472
(Human Engineering Design Criteria for Military Systems, Equipment, and Facilities).

MIL STD 1474B
(Noise Limits For Army Materiel).

MIL–HDBK–472
(Maintainability Prediction).

MIL–M–73035
(Front-End Analysis).

MIL–M–36036
(New-Look Operator's Manuals).

MIL–M–63037
(Organizational DSIGS Logic Tree Style).

MIL–M–63038
(Organizational, DSIGS Maintenance).

MIL–M–63040
(Extension Training Materiels).

Appendix B
NONDEVELOPMENT ITEM (NDI) ACQUISITION MODEL

Note: See the NDI acquisition flow chart (fig 3-1) a fold-in page, located at the end of the regular size pages.

B–1. Event 1: Coordinated Materiel Proposal.

a. References.

(1) AR 70-1.

(2) AR 71-9.

b. Description. Materiel proposals may originate from any user or staff source identifying a need for a new item or modification or improvement of existing item. The primary action office is the logistician who will assign a project number and forward to the combat developer for coordination with MEDMAP participants. The purpose of clearing through the logistician is to establish a central control point to monitor and track actions through the MEDMAP.

B–2. Event 2: Review and Analysis.

a. References.

(1) AR 7D-1.

(2) AR 71-9.

b. Description. The combat developer will staff the proposal with the Joint Working Group (JWG) members for preliminary review. This may be done either telephonically or by document review. If the consensus is that the proposal is valid. it will be scheduled for final review and decision by the JWG. The JWG will normally meet

quarterly. In exceptional circumstances, the final decision may be made during the preliminary review and analysis. As a mini-mum, the factors below will be considered during the review and analysis.

(1) Need or mission.

(2) Logistics.

(3) Definition of organizational design.

(4) Market survey.

(5) MACOM staffing.

(6) Training concepts.

B–3. Event 2a: JWG Decision.

a. Reference. AR 71-9

b. Description. The mission assignee agency chairs the JWG to review the data and information resulting from events 1 and 2. This is a critical decision point. A decision is made by the JWG to take the proper course of action to satisfy the materiel proposal. The JWG consists of the mission assignee agency or logistician, Academy of Health Sciences (HSHA-CDM), and the materiel developer (USAMRDC). Other participants in the MEDMAP will attend as observers.

B–4. Event 3: Minor Medical Equipment Requirement (MIMER) Document.

a. Reference. This regulation.

b. Description. A MIMER documents the requirement for low-dollar value commercially available medical items not requiring type classification. Refer to chapter 3 for content. The combat developer prepares these documents in coordination with the mission assignee agency or logistician and training developer.

B–5. Event 4: Letter Requirement (LR).

a. References.

(1) AR 70-1.

(2) AR 71-9.

b. Description.

(1) The LR represents an abbreviated procedure to acquire low-dollar value items and nondevelopment items (NDIs) that require type classification. Low-dollar value or NDI items are those items for which the total RDTE expenditures will not exceed $6 million. and the acquisition costs will not exceed $12 million for any 1 fiscal year or $25 million for the 5-year program period .

(2) The LR is prepared by the combat developer in coordination with the mission assignee agency or logistician, the materiel developer, training developer, and OTSG.

B–6. Event 5: BOIP/QQPRI Feeder Reports.

a. References.

(1) AR 71-2.

(2) AR 611-1.

(3) AR 708-1.

b. Description. BOIP and QQPRI will be prepared and expedited according to AR 71-2 by the mission assignee agency in coordination with combat developer and training developer, submitted through OTSG(DASG-HCD) to TRADOC, in conjunction with the requirements document. After development of the BOIP and MOS decision, TRADOC will forward these items and the requirements documents (ROC only) to HQDA(DAMO-RQR) for approval.

B–7. Event 6: Logistics Support and Training Planning.

a. References.

(1) AR 71-9.

(2) AR 611-1.

(3) AR 700-127.

b. Description.

(1) Logistics support planning and training planning are initiated early in the requirements definition phase and continue throughout the MEDMAP. The training developer submits supporting data to the mission assignee agency for inclusion in the Program Management Plan (PMP).

(2) The LR will identify Logistical Support Planning and Training Planning of both the mission assignee agency and training developer. Logistical Support Planning should include:

(a) Logistical support concepts.

(b) Logistical support management.

(c) Logistical support funds.

(d) Maintenance concepts.
(e) LSAILSAR.
(f) Supply support.
(g) Support and test data.
(h) Technical data.
(i) Transportation and handling.
(j) Support facilities.
(k) Logistical support management information.

(3) The mission assignee agency training plans should include plans for New Equipment Training (NET) and for providing training to the test organization and the trainer. The training developer should provide plans for-

(a) Training methods, programs, and media.
(b) Training devices and aids.
(c) Training for test, operator, and maintenance personnel.
(d) Skill performance aids (SPAs).

B–8. Event 7: Budgetary Input.

a. References

(1) AR 70-1.
(2) AR 70-10.
(3) AR 71-3.
(4) AR 37-100-xx.

b. Description. The logistician will provide estimated budgetary requirements to OTSG for acquisition funds for central funded items. These estimations are based on recommended issue densities and issue priority.

B–9. Event 8 Program Management Plan (PMP).

a. Reference. AR 70-17.

b. Description. The PMP for an NDI item will be a document tailored to support the acquisition and deployment phase. The basic format in AR 70-1will be followed. The mission assignee agency will prepare the PMP with input from other activities taking part in the MEDMAP. The PMP will be updated and revised as information is evolved.

B–10. Event 9 Independent Evaluation Plan.

a. References.

(1) AR 71-3.
(2) AR 1000-1.

b. Description. The mission assignee agency and the combat developer each prepare respective Independent Evaluation Plans (IEPs) for the mission assignee agency to consider when conducting the market survey. The training developer will provide input to the mission assignee agency's IEP. Each IEP will be provided to JWG members for information.

B–11. Event 10: User/Market Survey.

a. Reference. AR 70-1.

b. Description.

(1) The mission assignee agency conducts the user or market survey to take advantage of all existing information on a specific product. This survey is the basis for the IPR decision to pursue the NDI process. The survey will consider as a minimum:

(a) Existing products distribution.
(b) Marketplace (user) acceptance.
(c) Experience of users.
(d) Availability of manufacturers' quality control and test data.
(e) Warranties, maintenance, and repair services available.
(f) Publications, to include technical and training manuals.
(g) Spare and repair parts, special tools, test equipment, and other support equipment requirements and availability.
(h) Issues and criteria in IEPs.
(i) Logistics support alternatives: supportability and maintainability characteristics.
(j) Comparability of commercial use profiles with intended military mission profiles.
(k) Operator and maintenance skill and training requirements.
(l) Reliability, availability, and maintainability (RAM) characteristics.
(m) Contractor configuration control.

(n) Capability of contractor support in specific oversea areas when the item will be deployed.

(2) The above data will be used to address those ILS issues that apply to each specific NDI item. The intent of this process is to tailor ILS planning to the relative technical complexity of the item being evaluated.

B–12. Event 11: Technical Data Package.

a. Reference. AR 70-1

b. Description. The mission assignee agency compiles technical data, using information from the user or market survey. These data are incorporated into the solicitation. They describe the minimum essential physical, functional, and other characteristics necessary to meet the stated requirements.

B–13. Events 12-16: Update of the Integrated Logistic Support (ILS) Package Elements.

a. Reference

(1) AR 70-1.

(2) AR 700-127.

(3) DA Pam 700-127.

b. Description. The ILS Support package is updated for input into the Program Management Plan (PMP). Input into the PMP is a function of the mission assignee agency in coordination with the training developer. The input includes: Materiel fielding plan (MFP), maintenance support plans, planning coordination with the Defense Personnel Support Center and the Defense Medical Materiel Board, user and maintenance training requirements, training publication requirements, and the training plan support package.

B–14. Event 17: Program Management Plan (PMP) Update.

a. References.

(1) AR 70-1.

(2) AR 71-9.

(3) AR 700-127.

b. Description. The PMP is updated, using information from the user or market survey, the technical data package, and the updated ILS program. The mission assignee agency has the primary responsibility with input from the combat developer and training developer.

B–15. Event 18: Final BOIP/QQPRI.

a. References.

(1) AR 70-1.

(2) AR 71-2.

(3) AR 611-1.

(4) AR 708-1.

b. Description. The combat developer expedites the submission of the FBOIP/FQQPRI for NDI according to AR 71-2.

B–16. Event 19: Requirements Document Update.

a. References.

(1) AR 70-1.

(2) AR 71-9.

b. Description. The requirements document (LR or MIMER) is updated to allow satisfaction of the need by the best alternatives identified during the user or market survey. This update must be acceptable to the requiring activity.

B–17. Event 20: Independent Evaluation Report (IER).

a. References.

(1) AR 70-1.

(2) AR 70-10.

b. Description. The IER provides assessments of the NDI's technical performance and operational effectiveness as well as to identify specific points or issues that were addressed in the user or market survey. The mission assignee agency and combat developer will prepare these as required with input from the training developer.

B–18. Events 21 and 22: NDI MADP review and Approval.

a. References. AR 70-1

b. Description. In this review the data obtained in the user or market survey and supporting events will be validated, the IER will be reviewed, and one of the following decisions will be made:

(1) The NDI acquisition to meet the needs of the LR or MIMER will be pursued. Also, approval will be made on

the technical data package, the draft MFP, ILS plans, and type classification (if required). A final DA-approved BOIP and MOS decision are required if the item is type classified. If this is the IPR decision, proceed to event 31.

(2) Request additional data or testing to support an NDI decision. Issues to be resolved and the means to obtain the additional data or to conduct the testing will be identified. This includes the type and source of funds.

(3) Use another acquisition strategy because NDIs cannot satisfy the requirement.

The MADP review minutes will be submitted to OTSG for resolution (in the absence of concurrence between the participants) or for approval.

B–19. Event 23: Conduct Technical Feasibility Test.

a. References.

(1) AR 70-1.

(2) AR 70-10.

(1) AR 71-3.

b. Description. The mission assignee agency conducts this test to provide more data for technical evaluation as requested by NDI decision IPR.

B–20. Event 24: Conduct User Testing.

a. References.

(1) AR 70-1.

(2) AR 70-10.

(3) AR 71-3.

b. Description. The operational tester (through the designated test organization) conducts this test to examine commercially available equipment and validate training materiel and other aspects of the ILSP, An IPR can request this test to provide additional data for decisionmaking reviews.

B–21. Event 25: Technical Feasibility Test and User Test Reports.

a. References.

(1) AR 70-1.

(2) AR 70-10.

(3) AR 71-3.

b. Description. The mission assignee agency and the test organization will submit these reports for update of the PMP.

B–22. Event 26: Update ILS Program and PMP.

a. References.

(1) AR 70-1.

(2) AR 71-3.

(3) AR 700-127.

b. Description. Test data from the TFT and user test will be used to update the ILS program and later the PMP. The mission assignee agency will coordinate these updates.

B–23. Event 28: ILS.

a. References.

(1) AR 70-1.

(2) AR 70-10.

(3) AR 71-3.

b. Description. See event 20.

B–24. Events 29 and 30: NDI MADP Review (II) and Approval.

a. References.

(1) AR 70-1.

(2) AR 71-9.

b. Description. This review is required only to review the additional date requested in event 21 and to make a decision to enter the acquisition or deployment phrase. MIMER item not requiring type classification will proceed to event 31 (standardization).

B–25. Event 31: Standardization.

a. References.

(1) AR 10-65.
(2) AR 40-61.
(3) AR 708-1.

b. Description. Standardization will be initiated by the logistician in response to an affirmative NDI decision. Supporting technical data will be provided by the mission assignee agency.

B–26. Event 31: MES or CTA 8-100 Update.

The NSN assigned in event 31 will be used to update the MES or CTA 8-100.

B–27. Events 33, 34, and 35: Type Classification Package Preparation, Approval, and SB 700-20 Update.

a. References.
(1) AR 70-61.
(2) AR 708-1.

b. Description. The logistician provides the type classification documentation support package to the AMEDD Technical Committee. The "Read for the Record" document is authenticated and submitted to HQ, DARCOM for recording and ultimate staffing by DCSOPS. SB 700-20 is updated with the assignment of a permanent LIN to the NDI item.

B–28. Event 36: TOE Update.

a. References.
(1) AR 70-61.
(2) AR 310-34.

b. Description. The combat developer will provide TRADOC necessary information to update the TOE based on the BOIP after assignment of standard LIN.

B–29. Event 37: Implement Training Program.

a. In this event the training plan support package (TPSP) of the PMP is reviewed and implemented by the trainer to meet IOC

b. The trainer will also provide input from the TPSP to the logistician for contract award for support equipment, SPAs and to the IOC documents.

B–30. Events 38 and 39: Award of Contract/Production and Initial Operational Capability (IOC).

a. References.
(1) AR 70-1.
(2) AR 700-127.
(3) AR 750-1.

b. Description. The logistician will coordinate the contract award (through the DMMB) with DPSC. IOC will be obtained with the first attainment of the capability by a TOE unit to employ effectively a production item. For MIMER items IOC will be achieved with the fielding and successful deployment of parent medical assemblage. IOC for CTA 8-100 items will be non-critical because of the local command decision process. </subpara1></para0>

B–31. Event 40: Follow-On Evaluation (FOE).

a. References.
(1) AR 7-1.
(2) AR 471-3.
(3) AR 700-127.

b. Description. The combat developer may monitor and evaluate logistical support and operational aspects of the NDI program by using FOE by the initial units receiving the NDI equipment. This feedback will indicate any shortcomings requiring corrective actions.

Appendix C
MEDICAL EQUIPMENT SET (MES) ACQUISITION MODEL

Note: See the MES acquisition flow chart (fig 3-2), a fold-in page, at the end of the regular-size pages.

C–1. Event 1: MES Development Concept.

the combat developer will form an MES development concept using capability goals set forth by DA. An operational

concept and mission profile of using units will further define the basic need for developing a new MES or revising an existing MES.

C–2. Event 2: Requirements Document.

The combat developer (AHS) will prepare a requirements document (AR 71-9) for a new MES. This document will be based on a mission profile and the operational concept for the particular MES in relation to its supported TOE. The mission profile will be based upon current or proposed clinical, tactical, and field medical support doctrine. The requirements document for the MES will also include an assessment of training and testing requirements and recommendations for alternate means of testing the MES. The purpose of the MES requirements document is to plan the resources for the PPBES and will not be used for any new materiel acquisitions. A separate requirements document will be initiated for all new materiel acquisitions.

C–3. Event 3: Approval of Requirements Document.

The combat developer and the mission assignee agency will authenticate Letter Requirements (LRs) in coordination with the medical materiel developer. The LRs will be submitted to the OTSG for approval before initiation of developmental actions fur the MES. Directorate, Heath Care Operations, OTSG, will coordinate the staffing of the documents within OTSG. The approved requirements documents establish the doctrinal base upon which the AHS will develop the MES. All other requirements documents (ROCs) for major programs, designated acquisition programs, and DA IPR programs will be submitted to HQDA (DAMO-RQR) for approval.

C–4. Event 4: Select MES Development Panel.

At the same time as the action in event 3, above, the AHS will, in coordination with HSC and the combat developments advisory council, initiate actions to designate the chiefs and other professional members of the MES Development Panels.

C–5. Event 5: Outline Test Plans/Resume Sheets (OTRs/RSs).

The designated test organization will prepare OTPs/RSs when testing is anticipated as documented in the requirements document.

C–6. Event 6: Program Management Plan (PMP).

The PMP is a tailored document prepared by the combat developer to support the development, training, testing, assembling, and fielding of the MES. In the PMP technical analysis, program decisions, and development milestones are documented. Other participating activities provide input.

C–7. Event 7: Submission of BOIP Feeder Data and QQPRI.

The mission assignee agency in coordination with the combat or training developer will initiate BOIP feeder data and QQPRI according to AR 71-2 for forwarding to HQ, TRADOC.

C–8. Event 8: Development of MES Component Listing.

a. The development panel will develop the MES according to the requirements document and the guidance provided in chapter 3.

b. The panel will weigh the factors below to determine the type and quantities of items required for the MES:

(1) Item of choice for a specific need.

(2) Potential of the item for multiple uses.

(3) Skill level of personnel using the item.

(4) Availability of the item within DOD.

(5) Current state-of-the-art.

(6) Current standardized medical equipment and supplies.

(7) Stockage criteria.

(8) Commonality of items.

(9) Redundancy.

(10) Training requirements.

(11) Item characteristics (potency, shelf life, maintainability, durability, special storage requirements, simplicity, reliability, weight, cube, transportability, etc.).

(12) DOD Tri-Service D-day significant items list.

C–9. Event 9: MACOM Staffing of Proposed MES.

a. AHS will staff the proposed MES (Draft) with selected using units, major Army commands (MACOMs), and panel team chiefs for review, comment, and recommendations.

b. The combat developer (AHS), medical materiel developer, and mission assignee agency (USAMMA) will review

the proposed MES to identify those developmental equipment requirements that will be subjected to the MEDMAP. Actions needed to initiate the acquisition process for these items should begin in the DVAL phase.

C–10. Event 10: Logistical Analysis and Funding.

a. Also, the proposed MES will be submitted to the logistician (USAMMA) for review and analysis of medical logistic support requirements. This analysis will include as a minimum:

(1) Consideration of ILS elements. (See AR 700-127.)

(2) Impact on prepositioned war reserve materiel (PWRM), POMCUS, and other mobilization programs.

(3) Costs and associated funding requirements and PPBES interface.

(4) Stock availability and storage considerations.

(5) Commonality with other military Services (MILSVCs).

(6) Standardization and substitutability.

b. Based on the materiel requirements identified in the proposed MES, USAMMA will initiate actions to determine funding requirements. Requirements will be provided to HQDA (DASG-HCL) for inclusion into the Army program objective memorandum (POM) and budgetary cycles. (See chap 4.)

C–11. Event 11: Training Front-End Analysis (FEA).

The training developer (AHS) will review the MES to conduct an FEA to identify training support requirements.

C–12. Event 12: Joint Working Group (JWG).

The combat developer (AHS) will chair a JWG to consider the results of the staffing actions for the proposed MES before the logistical analysis, fielding plan, and the individual collective training plan are finalized. Unresolved issues arising out of the various functional analyses (events 9 through 11) will be resolved to produce an updated MES listing.

C–13. Event 13: Update MES Listing.

The combat developer will update the proposed MES listing for use in finalizing logistical support plans and collective training program and movement into the full-scale development phase. The BOIP/QQPRI is applied to the TOE: the necessary support equipment and personnel are added.

C–14. Event 14: Coordinate Nonmedical Support Equipment Requirements.

The combat developer (AHS), in coordination with the logistician (USAMMA), will analyze the proposed MES to determine the nonmedical support equipment impact for the proposed set.

C–15. Event 15: Initiate Requirements Documents for Medical Support Equipment.

The combat developer will initiate requirements documents as necessary for medical support equipment. This action should commence as early as possible so as not to delay fielding of the MES because of the lack of medical support equipment.

C–16. Event 16: Finalize Logistics Planning.

a. USAMMA will prepare a draft supply catalog SC 6545-S-CL series for the MES and a draft MFP.

b. Acquisition of the prototype MES components will be initiated in anticipation of packing analysis and testing requirements.

c. The proposed MES will be standardized through the Defense Medical Materiel Board (DMMB) to make subsequent type classification actions easier.

d. Logistical support plans to include ILS issues will be more clearly defined based on the updated MES testing.

C–17. Event 17: Development of Individual Collective Training Plan (ICTP) and Other Training Publications.

The training developer will develop an ICTP and draft training publications based on the updated MES listing.

C–18. Event 18: MES Packing Analysis.

The mission assignee agency (USAMMA) will c6ordi-nate the building of a prototype MES with the DPSC, and the DARCOM Packaging, Storage, and Containerization Center. USAMMA will insure that a preliminary assessment of functional packing requirements is identified during the building of the prototype MES.

C–19. Event 19: Update Program Management Plan.

The combat developer will update the PMP to include trade-off decisions and updates to logistical and training support plans.

C–20. Event 20: MADP Review (DVAL).

A review chaired by the chairman, as designated according to paragraph 3-55(3), will be convened to recommend proceeding into full-scale development (Phase II). Recommendations for testing should be included in the review. The minutes of the review will be provided to the AMDTC for approval. (See events 21 and 22.)

C–21. Event 21: Submission of Read Ahead Package.

The combat developer (AHS) will submit the finalized MES component listing and IPR minutes in a read ahead package to all AMDTC members for review. The ICTP, the prototype packing assessment, logistical analysis, materiel fielding plan, and requirements for testing of the prototype MES will also be presented to the AM'D TC for approval as part of the read ahead package.

C–22. Event 22: AMDTC Decision Review.

Upon completion of AMDTC staffing, the combat developer (AHS) will formally present the MES to the AMDTC for TSG approval. Approval constitutes type classification of the MES for the AMEDD contingent upon all other regulatory requirements being accomplished (DA approved FBOIP, QQPRI, and approved requirements document) and initiates the Production and Deployment Phase. If AMDTC mandates testing of the MES, type classification approval is withheld pending results of events 23 through 29.

C–23. Events 23 and 24: Prototype Testing.

Approval of the testing recommendations by the AMDTC will initiate these actions. Testing of MES will normally be accomplished by CEP Testing or Force Development Testing and Experimentation (FDTE); however, OT may be conducted as required. Policies for conducting these tests are set forth in chapter 5 of this regulation and in AR 71-3.

C–24. Event 25: Independent Evaluation Report (IER).

The combat developer prepares the IER. The JER provides an assessment of the test results and identifies specific points and issues that may need clarification or reevaluation.

C–25. Event 26: MADP Review (Full-Scale Development).

Significant problems or deficiencies identified during testing, for which the corrective actions will significantly alter the composition of the MES, will be resolved by MADP review and approved by the AMDTC.

C–26. Events 27 and 28: AMDTC Decision Review.

This review is required only when significant changes are recommended by the MADP review, based on testing results.

C–27. Events 29 an 30: Type Classification Package Preparation.

Approval, and SB 700-20Update. The logistician provides the. type classification documentation support package to the AMEDD Technical Committee. The 'Read for the Record' document is authenticated and submitted to HQ, DARCOM for recording and later staffing by DCSOPS. SB 700-20 is updated with the assignment of the permanent LIN to the MES.

C–28. Event 31: TOE Update.

When the MES has been type classified, assigned Standard UN, and published in SB 700-20, chapter 2, CG, TRADOC will apply the MES to the TOE in the semiannual consolidated change table (CCT). Based on receipt of the CCT, MACOM will apply MES to MTOE for units under their jurisdiction. These MTOEs serve as authorization for units in the field to requisition the MES and its component parts.

C–29. Event 32: Publication of Doctrine and Training Manuals.

The training developer will initiate the publication of these manuals and other supporting literature (i.e., Army Training and Evaluation Program ARTEP)) to meet first unit equipped date (FUED).

C–30. Event 33: MES Component Standardization.

The logistician (USAMMA) will initiate actions to the DMMB to standardize all components to the MES that do not require developmental efforts.

C–31. Event 34: Publish Supply Catalogs.

Based on the final approved MES development listing, and congruent with fielding, USAMMA will publish supply catalogs.

C–32. Events 35 and 36: Assembly/Deployment and Initial Operational Capability (IOC).

The mission assignee agency will coordinate the MES assembly program. IOC will be achieved after FUED with the first attainment of the capability by TOE unit to employ the new MES effectively.

C–33. Event 37: Follow-on Evaluation (FOE).

The combat developer and other participants may monitor and evaluate logistical and training support and operational aspects of the MES program by using FOE, with the initial units receiving the equipment. This feedback will indicate any shortcomings requiring corrective actions.

Glossary

Section I
Abbreviations

AAO
authorized acquisition objective

ABCA
American, British, Canadian, and Australian

AHS
Academy of Health Sciences, US Army

AMDTC
Army Medical Department Technical Committee

AMEDD
Army Medical Department

AMMH
annual maintenance man-hours

AOP
Additive Operation Project

ARNG
Army National Guard

ARTEP
Army Training and Evaluation Program

BOIP
basis of issue plan

BOIPFD
basis of issue plan feeder data

CARDS
catalog of approved requirements documents

CCB
Configuration Control Board

C^4
command, control, communications, and computers

CCT
consolidated change table

cdr
commander

CEP
Concept Evaluation Program

CFP
concept formulation package

CG
commanding general

COEA
cost and operational effectiveness analysis

comdt
commandant

CTEA
cost and training effectiveness analysis

CTP
coordinated test program

DA
Department of the Army

DARCOM
US Army Materiel Development and Readiness Command

DCSOPS
Deputy Chief of Staff for Operations and Plans

DCSPER
Deputy Chief of Staff for Personnel

DEVA
Development Validation

DLA
Defense Logistics Agency

DMMB
Defense Medical Materiel Board

DOD
Department of Defense

DPSC
Defense Personnel Support Center

DPTOE
draft plan TOE

DT
development testing

DTP
detailed test plan

EAD
equipment availability date

EIA
environmental impact assessment

EIS
environmental impact statement

ETM
extension training materiel

FBOIP
final basis of issue plan

FDA
Food and Drug Administration

FDTE
Force Development Test and Experimentation

FEA
front-end analysis

FMOS
final MOS

FOE
follow-on evaluation

FQQPRI
final QQPRI

FSD
full-scale development

FSC
Federal Supply Classification

FUED
first unit equipped date

FYDP
Five Year Defense Program

HHA
health hazard assessment

HQDA
Headquarters, Department of the Army

HSC
Army Health Services Command

ICTP
individual and collective training plan

IE
independent evaluation.

IEP
independent evaluation plan

IER
independent evaluation report

ILIR
In-House Laboratory Independent Research

ILS
Integrated Logistic Support

INSCOM
US Army Intelligence and Security Command

IOC
initial operational capability

IPR
in-process review

IPT
initial production testing

ISD
instructional system design

ITP
individual training plan

JMSNS
Justification for Major System New Starts

JSOR
Joint Service Operational Requirement

JTA
joint table of allowances

JWG
Joint working Group

LCM
Life Cycle Management

LOA
Letter of Agreement

LR
Letter Requirement

LSAR
logistic support analysis requirement

MACI
military adopted commercial item

MACOM
Major Army command

MADP
Materiel Acquisition Decision Process

MEDMAP
Medical Materiel Acquisition Process

MES
medical equipment set

MFP
materiel fielding plan

MIMER
Minor Medical Equipment Requirement

MOS
military occupational specialty

MRSA
Materiel Readiness Support Activity

NATO
North Atlantic Treaty Organization

NET
new equipment training

NDI
nondevelopment item

NICP
national inventory control point

ODCSOPS
Office of the Deputy Chief of Staff for Operations and Plans

OFT
operational feasibility testing

OICTP
outline individual and collective training plan

OMA
Operation and Maintenance, Army

OMAR
Operation and Maintenance, Army Reserve

OMARNG
Operation and Maintenance, Army National Guard

OSD
Office of the Secretary of Defense

OSUT
on-site user test/testing

OT
operational test (I, II, 11a): operational testing

OTP
outline test plan

OTRS
operational test readiness statement

OTSG
Office of The Surgeon General

PA
procurement appropriation

PI
product improvement

PIP
Product Improvement Program

PMP
Program Management Plan

POI
program of instruction

POM
program objective memorandum

POMCUS
prepositioned materiel configured to unit sets

PPBES
planning, programing, budgeting, and execution system

PRIMIR
Product Improvement Management Information Report

PRIPROG
Priority Program

PWRMR
prepositioned war reserve materiel requirements

QQPRI
qualitative and quantitative personnel requirements information

R&D
research and development

RAM
reliability, availability, and maintainability

RCM
reliability centered maintenance

RDTE
research, development, test, and evaluation

ROC
Required Operational Capability

RS
resume sheet

RSC
readiness significant component

RSI
rationalization, standardization, and interoperability

SPA
skill performance aid

SPEF
Single Program Element Funding

SPF
Single Project Funding

SSI
special skill identifier

SSN
standard study number

SSP
system support package

STD LI
standard line item number

STO
Science and Technology Objective

TAEDP
The Army Equipment Distribution Plan

TCATA
TRADOC Combined Arms Test Activity

TCD
type classification date

TDA
table of distribution and allowance

TDP
technical data package; test design plan

TDR
Training Device Requirement

TFT
technical feasibility test

TIWG
Test Integration Working Group

TM
technical manual

TMDE
test, measurement, and diagnostic equipment

TOE
table(s) of organization and equipment

TPSP
training plan support package

TRADOC
US Army Training and Doctrine Command

TRS
test readiness statement

TSARC
Test Schedule and Review Committee

TSG
The Surgeon General

TSP
test support package

TTSP
training test support package

USACSC
US Army Computer Systems Command

USAEHA
US Army Environmental Hygiene Agency

USAMMA
US Army Medical Materiel Agency

USAMRDC
US Army Medical Research and Development Command

USAR
US Army Reserve

Z LIN
developmental line item number

Section II
Terms

Brassboard configuration.
An experimental device (or group of devices) used to determine feasibility and to develop technical and operational data. It will normally be a model sufficiently hardened for use outside the laboratory environments to demonstrate the technical and operational principles of immediate interest. It may resemble the end item, but is not intended for use as the end item.

Breadboard configuration.
An experimental device (or group of devices) used to determine feasibility and to develop technical data. It will normally be configured. only for laboratory use, to demonstrate the technical principles of immediate interest. It may not resemble the end item and is not intended for use as the projected end item.

Catalog of approved requirements documents (CARDS).
A DA catalog of approved objectives and requirements that provides guidance to combat development activities and the research and development (R&D) program

Collective training.
Group training, either in instructions or units, that prepares crews, teams, squads, and platoons to accomplish the group tasks as an entity.

Combined development and operational testing (DT/OT).
Testing conducted jointly by DT and OT test organizations to achieve test objectives for both DT and OT. It can be a complete test, a subtest, or a phase of a test.

Concept Evaluation Program (CEP).
A user equipment test program that provides the AMEDD with a simplified method of resolving test issues that lead

themselves to test in a non-operational environment. CEP is conducted with HSC-controlled funds, personnel. equipment, and units.

Concept Exploration Phase.
The first phase in the materiel life cycle. The technical, military. and economic bases for the program and concept feasibility are established through pertinent studies and the development and evaluation of experimental hardware . Threat projections, technological forecasts, and joint and Army plans are examined by combat developers to deter-mine operational capabilities. doctrine, organization. or potential materiel systems that will improve Army Forces.

Coordinated Test Program (CTP).
A planning document that formalizes the all-inclusive testing activities relating to a development and nondevelopment item project. It is evolutionary, sectionalized by major tests, and developed and maintained by the materiel developer on an item or system basis. It is coordinated with proper agencies before approval.

Cost of operational effectiveness analysis (COEA).
A documented investigation of-

a. Comparative effectiveness of alternative means of meeting a requirement for eliminating or reducing a force or mission deficiency.

b. The validity of the requirement in a scenario that has the approval of TRADOC and HQDA.

c. The cost of developing, producing, distributing, and sustaining each alternative for a time preceding the combat application.

Cost and training effectiveness analysis (CTEA).
A methodology that involves documented investigation of the comparative effectiveness and costs of alternative training systems for attaining defined performance objectives. Usage patterns and training scenarios are taken into consideration. Training concepts: training equipment: training strategies: programs of instruction: and training impacts of new materiel, organization. tactics. and employment techniques or families of systems may be examined in a CTEA.

Critical issues.
Those issues, associated with the development of an item or system, that are of primary importance to the decision-maker in reaching a decision to allow the item or system to continue into the next phase of development.

Demonstration and Validation Phase.
The second phase in the developmental materiel life cycle. This phase may include the use of advanced development prototypes in development and operational tests. The validation process may be conducted using competitive or single contractors or by in-house laboratories. It consists of those steps that are necessary to-

a. Resolve or minimize special logistics problems identified during the concept evaluation phase.
b. Verify preliminary design and engineering.
c. Accomplish necessary planning.
d. Fully analyze trade-off proposals.
e. Prepare contracts required for full-scale development.

Detailed test plan (DTP).
A set of explicit instructions for directing every phase of the test, particularly test control and data collection and analysis. For user equipment testing, a DTP is normally combined with and titled the test design plan.

Doctrinal and organizational test support package.
This package is provided by the combat developer and contains the following elements: Means of employment (e.g., doctrine, tactics, techniques): organization (e.g. . MOS, basis of issue, unit structure); logistical concepts (e.g., applicable supplies, transportation, maintenance): mission profiles (e.g., types of combat activities, frequency of events in combat missions, and times of events and between events): and test setting (e.g., situation showing interactions among threat, friendly actions, and environment). This package may include a list of pertinent field manuals FMs) or FM extracts.

Development tester.
An activity engaged in conducting development testing that may be any one or a combination of the materiel developer's activities, including the contractor.

Development testing (DT).
Testing of materiel systems conducted by the materiel developer. The principle of a single. integrated development test cycle is used to demonstrate that the design risks have been minimized, the engineering development process is

complete, and the system will meet specifications; and to estimate the system's military utility when it is introduced. DT is conducted in factory, laboratory, and proving ground environments.

Environmental impact assessment (EIA)/ environmental impact statement (EIS).
An analysis of ongoing activities or proposed plans and programs that include systematic analyses of the environmental impact (adverse and beneficial) on land, air, water, man, and other biota.

First unit equipped date (FUED).
The scheduled date a system or end item and its agreed upon support elements are issued to the designated IOC unit and training specified in the NET plan has been accomplished. Support elements to be issued with system or end item will be specified in the materiel fielding plan or other gaining command developer agreement documents.

Front-end analysis (FEA).
In training development, precisely defining performance requirements through equipment analysis and functional analysis, which yields a total task list; assessing the requirements of each task against target population skills; and deter-mining which tasks (although covered by the related technical manual) require supplementary training. (Other) The analysis phase of Instructional System Design (ISD) in which doctrine is combined with the job and task analyses process.

Full-Scale Development Phase.
The third phase in the materiel life cycle during which a system, including all items necessary for Its support, is fully developed. engineered, fabricated, tested, and initially type classified. Concurrently, non-materiel aspects required to field integrated system are refined and finalized. These include such aspects as basis of issue plans (BOIPs): personnel and equipment requirements and publications; integrated logistic support: and modifications of doctrine, organization and MOS.

Health hazard assessment.
The evaluation of potential or real hazards to health and/or performance of user or test personnel inherent to the design and operation of materiel. In this assessment, issues on health, human factors, and safety are considered by appropriate, qualified professionals in these disciplines.

High-risk task.
Those critical operational or maintenance procedures that have a high potential for performance shortfall and a corresponding adverse impact on overall system performance if soldiers are not trained to perform them to standard.

Independent evaluation, DT.
The process by which the materiel developer examines development test data and test reports; extrapolates from other evidence, including experimental and analytical data; and uses engineering judgment to assess and evaluate the capabilities of the tested materiel system, including RAM. Each independent evaluation assesses the adequacy of testing and the validity of the test results.

Independent evaluation (user tests).
The process by which the combat developer examines the test design and test report to extrapolate from other evidence, including experimental, historical, and analytical data; and which provides military judgment to assess or estimate the military utility and operational effectiveness of the tested system, including RAM. For user tests, it is used to concentrate on the operational aspects of the materiel system and to consider other programmed testing and comments. on operational tests provided by participants in the materiel acquisition process. Each independent evaluation is used to assess the adequacy of testing and the validity of test results.

Independent evaluation plan (IEP).
The materiel developer's or operational tester's internal master plan to evaluate a materiel system's technical or operational effectiveness.

Independent evaluation report (IER).
A report that provides an assessment of item or system. technical performance and operational effectiveness versus critical issues as well as the adequacy of testing to that point in the development of the item or system.

Individual and collective training plan (ICTP).
A plan developed to reflect how training on new and improved equipment will be incorporated into CONUS schools, training centers, and units worldwide. The plan details all training support required for weapon/equipment systems. It

also describes the training required. both individual and collective for each MOS and TOE associated with the w e a p on /equipment system.

Individual training plan.
A formally documented plan that presents the total training requirement for one enlisted MOS or officer specialty and which provides for resource management.

Initial operational capability (IOC).
The initial operational capability is the first attainment of the capability by a TOE unit and supporting elements to operate and maintain effectively a production item or system provided:

a. The item or system has been type classified as standard or approved for limited production

b. The unit and support personnel have been trained to operate and maintain the item or system in an operational environment.

c. The unit can be supported in an operational environment in such areas as special tools, test equipment, repair parts, documents, and training devices.

In-process review (IPR).
During the life cycle of non-major programs. IPRs will be held (luring which project status will be discussed and a course of action will be recommended. IPRs are a vital part of the RDTE Materiel Acquisition Decision Process (MADP). Their purpose is to provide recommendations, with supporting rationale, as a basis for system concept, system development, type classification, and production decisions by the appropriate level of authority. They are intended to be forums at which agencies responsible for taking part in the materiel acquisition process can present their views and insure that these views are considered during development, test, evaluation, and production.

Integrated Logistic Support (ILS).
A composite of all the support considerations necessary to assure the effective and economical support of a system for its life cycle. It is an integral part of all other aspects of systems acquisition and operation. ILS is characterized by harmony and coherence among all the logistic elements. The principal elements of ILS related to overall system life cycle include the maintenance plan, support and test equipment, technical data, facilities, personnel and training, supply support, transportation and handling, logistic support resource funds, and logistic support management information.

Letter of Agreement (LOA).
A jointly prepared and authenticated document in which the combat developer and the materiel developer outline the basic agreements for further investigation of a potential materiel system. The purpose of the LOA is to insure agreement between the combat and materiel developers on the general nature and characteristics of the proposed system and the investigations needed to develop and validate the system concept, to define the associated operational, technical, and logistical support concepts, and to promote synchronous interaction between the combat developer and materiel developer during the con-duct of these investigations.

Letter Requirement (LR).
An abbreviated procedure to acquire low-dollar value items. The LR is jointly prepared and authenticated by the combat developer and the materiel developer, or in the case of MESs and NDI. by the mission assignee agency.

Life-cycle management (LCM).
The management of the total life span of a system or piece of equipment starting with program initiation and going through the operational phase up to retirement from the inventory. The acquisition process is divided into four phases: Concepts Exploration Phase, Demonstration and Validation Phase, Full-Scale Development Phase, and Production and Deployment Phase.

Logistician.
A command or agency other than the materiel developer, combat developer, training developer, and user representative, which is responsible for independent logistic surveillance and evaluation of materiel acquisition programs. The logistician accomplishes this by reviewing program documents for logistic support considerations and recommending changes to the proponents: by taking part in selected special task forces, special study groups, and test integration working groups; by taking part as a regular member of IPRs: and by assisting the logistic elements of combat and materiel developers, trainers, and user representatives in carrying out their respective functions in the Integrated Logistic Support Program.

Maintainability.
A characteristic of design and installation that inherently provides for an item to be retained in or restored to a specified condition within a given time when it is maintained in accordance with prescribed procedures and resources.

Maintenance test support package.
A composite package of support elements that is provided before and used during development, and operational and CEP testing and evaluation to validate organizational, direct support, and general support maintenance capability. It typically includes all required draft equipment publications (operator through general support maintenance equipment manuals); repair parts, accessories; special and common tools: test, support. calibration, and maintenance calibration shop facilities: and personnel skill requirements.

Materiel Fielding Plan (MFP).
A document, which in final updated form, contains all the detailed plans, schedules, procedures, actions, and status necessary to successfully deploy, process, and sustain a new item in the field. The MFP is capable of being transmitted to the gaining command and, with comparable gaining command plans, serves as the basis for signed agreements and replaces the Logistic Support Plans formerly required by AR 750-1.

Materiel system.
An item, system, or aggregate of systems of materiel. (For the OT, a materiel system includes: Operational and support personnel: the TOE organization within which the equipment is found; prescibed doctrine and tactics of employment: command and control equipment and procedures; and the training program. For the CEP tests, a materiel system includes: The support hardware; the operating and support personnel; prescribed doctrine; and the training program.) The term materiel system in this regulation refers to developmental and non-development end items as well as assemblages and their components.

Minor Medical Equipment Requirement (MIMER).
An abbreviated form of the LR used to acquire low-dollar value, non-development medical items. It is jointly prepared and authenticated by the mission assignee agency and combat developers.

Mission assignee agency.
An agency responsible for materiel management of items within specific Federal Supply Classifications (FSCs). AR 708-1 designates the following as mission assignee agencies: US Army Materiel Development and Readiness Command (DARCOM): The Surgeon General (TSG); the Office of the Assistant Deputy Chief of Staff for Operations and Plans Command. Control. Communications, and Computers (C4)): US Army Intelligence and Security Command (INSCOM); and US Army Computer Systems Command USACSC).

New equipment training (NET).
The initial transfer of knowledge from the developer or provider to the user and or trainer. This training is required to instruct on-site personnel in the use of equipment and establish a training base and, or unit training capability in MACOMs, NG. and Arm Reserve units for new or modified equipment.

Nondevelopment item (NDI).
Items or systems determined by an IPR to be available for acquisition to satisfy an approved materiel requirement with no expenditure of RDTE funds for development. modification, improvement. RDTE funds may be used for testing a potential candidate item to determine whether a requirement can be satisfied by an available item. At that time the program is still in the Concept Exploration Phase. Results of such testing are inputs to the IPR determination: for example, NDI acquisition strategy is or is not appropriate to satisfy the requirement.

On-site user testing (OSUT).
Testing per-formed to insure certain items or systems that are not being acquired for the Army in the field are ready for operational use. OSUT has objectives similar to DT II and OT II but is conducted on equipment at the operational site.

Operational test readiness statement (OTRS).
A statement of the materiel systems readiness for OT provided to the command or agency responsible for OT by the materiel developer, the combat developer, and the training developer. OTRS elements will be provided at one time before testing for separate OT following DT. Depending on the degree of time overlap between DT and OT OTRS are delivered at various times before and during DT.

Operational tester.
That command or agency responsible for the conduct of operational testing of items and systems. It derives pro-gram and budget information for OT, writes OT portion of the coordinated test program determines when, where, how, and

by whom OT will be accomplished and prepares operational test design plans, conducts or directs the conduct of OT reports on test results and provides independent evaluations.

Operational testing (OT).
Testing and evaluation of materiel systems accomplished with typical user operators, crews, or units in as realistic an operational environment as possible to provide data to estimate--

a. The military utility, operational effectiveness, and operational suitability of new systems. Suitability includes compatibility, interoperability, reliability. availability and maintainability, supportability, operational soldier-machine interface, and training requirements.

b. From the user viewpoint. the system's desirability. considering systems already available and the operational benefits and, or burdens associated with the new system.

c. The need for modification to the system.

d. The adequacy of doctrine, organization, operating techniques, tactics, and training for employment of the system; the adequacy of maintenance sup port for the system; and, when appropriate, its performance in a countermeasures environment.

Outline test plan (OTP)/resume sheet (RS).
The formal document included in the FYTP that contains appropriate administrative information; the test purpose, objective, scope, and tactical context: resource requirements; and cost estimates.

Product Improvement Program (PIP).
A program to incorporate an engineering change and/or a modification change after production to correct design deficiencies, improve operation or maintenance, reduce costs, simplify design, achieve compatibility with other systems/equipment, or enable it to be used in a new role.

Production and Deployment Phase.
The fourth phase of the developmental materiel life cycle. During this phase, operational units are trained, equipment is acquired to meet the authorized acquisition objective (AAO) and is distributed in accordance with the Army Equipment Distribution Plan TAE DP), and logistical support is provide4. Product improvements are applied to the equipment and/or support system when they are required by operational experience or to employ new technology and doctrine. Tables of organization and equipment (TOEs), tables of distribution anti allowances (TDAs), and common tables of allowances (CTAs) are defined or modified as required.

Program Management Plan (PMP) (formerly Acquisition Plan).
A document that records the program decisions: contains the user's requirements; provides appropriate analysis or technical options: and includes life cycle plans for development testing, production, training, and logistic support of materiel items. The PMP is used for both development and non-development items. It is the document of record that shows all phases of planning and program execution.

Provisioning.
Provisioning is the management process for determining and acquiring the number and quantity of different support items required to operate and maintain an end item for an initial period of service.

Qualitative and quantitative personnel requirements information (QQPRI).
A compilation of specified organizational, doctrinal, training, and personnel information developed by the materiel developer in coordination with TRADOC for new or modified materiel items.

Rationalization, standardization, and interoperability (RSI).
The means for increasing the capabilities of US and allied armies through the use of combined and integrated alliance resources to further national and alliance goals. RSI, as a concept, applies to all friendly and allied nations. Agreement on doctrine, tactics, procedures, and requirements is an essential foundation for the successful integration of RSI considerations into alliance programs and initiatives.

Reliability, availability, and maintainability (RAM).
The concepts, objectives, and responsibilities for RAM during system development as prescribed in AR 702-3. RAM characteristics must be specified for the design of the materiel and considered and assessed concurrently throughout the system life cycle. RAM applies primarily to systems developed, produced, or acquired for use by the Army in the field, specifically including facilities to the extent that they are integral components of Systems and modified systems.

Reliability centered maintenance (RCM).
An essential ingredient of thorough maintenance planning concentrating on that part of planning that requires the

determination of scheduled and unscheduled maintenance tasks. Through RCM a detailed logic process is provided to segregate maintenance requirements into on-condition, hardtime, and condition-monitoring categories.

Requirements documents.
Acquisition-related requirements documents prepared by the combat developer in coordination with the materiel developer. Examples are Science and Technology Objectives (STOs), Justification for Major System New Start (JMSNS), Letter of Agreement (LOA), Training Device Letter Requirement (TDLR), Required Operational Capability (ROC), Joint Service Operational Requirement (JSOR), Letter Requirement (LR), and Training Device Requirement (TDR).

Required Operational Capability (ROC).
An HQDA document that states concisely the minimum essential operational, technical, logistical, and cost information necessary to initiate full-scale development or acquisition of a materiel system.

Skill performance aids (SPAs).
a. A systematic approach to developing technical documents and training. The key features are as follows:
(1) Systematic analysis of the equipment to identify all performance tasks.
(2) Analysis of all tasks to develop step-by-step performance procedures.
(3) Development of soldier-tested manuals with full procedures.
(4) Identification of performance tasks that require supplementary training.
(5) Development of lesson and training management materials to directly support the technical manual. After all materials are validated and verified, the technical manual becomes the primary resource of all training. The TM is the primary reference source for using training materials.
b. Includes requirement for a front-end analysis (FEA) (i.e., task analysis, equipment analysis, functional analysis, behavioral task analysis).
c. A support package that enables Army units to receive, use, and maintain equipment with a minimum of outside technical assistance and outside training support. Training is restricted to teaching equipment specific task sequences, plus use of the technical manual that is the basic reference.

Storyboard.
A collection or series of small pictures that describe the action and content that will be contained in an audiovisual or visual-only production. A sequence of these small pictures comprises a storyboard.

Technical feasibility test (TFT).
This test is the responsibility of the materiel developer and provides test data for a technical evaluation and assessment of items and systems developed by another service, a foreign nation, or a commercial firm. The results of this type of testing may provide input for a new LR, LOA, or HOC; modification of an outline development plan, development plan, or the initiation of a PIP. TFT may be evaluated by the decision review as qualifying for DT 1.

Technical data package (TDP).
A term used to describe the documentation that specified the form, fit, function, and manufacture requirements for an item or service. The TDP is directly associated with the production package and includes selected technical data and other related data, such as specifications, plans, engineering drawings, standards, models, objectives, performance requirements, procedures, techniques, test and verification documents to insure conformance, or production package and production equipment component part purchase descriptions (AMCR-11-26).

Test design plan (TDP).
A formal document approved by the test organization that states the circumstances under which a test is executed, the data required from the test, and the means of handling test data.

Test organization.
The organization designated in the outline test plan or resume sheet for conducting a test. Also responsible for the functions in paragraph 2-8f.

Test Schedule and Review Committee (TSARC).
A DA committee that recommends test priorities; coordinates resources to support user testing; resolves conflicts between test requirements and other missions; and recommends approval of the Five Year Defense Program (FYDP).

Test support unit.
The command or agency that supports a test by providing military personnel and TOE units and a portion of the operational test directorate.

Trainer.
The command or agency responsible for conducting the training that will provide the skills necessary to operate and logistically support materiel systems being developed or otherwise acquired.

Training developer.
The agency responsible for developing the training program to include strategy, unit and institutional training requirements, program of instruction (P01) development, training aids requirements, and other associated training requirement functions.

Training device.
Any three-dimensional object developed, fabricated, or acquired specifically to improve the learning process. May be either system or non-system devices. System devices are designed for use with one system or item of equipment, including subsystems and components. Non-system devices are designed to support general military training and/or for use with more than one system or item of equipment.

Training test support package.
A package used to train user troops for testing and planning data collection on training requirements.

User testing.
A generic term encompassing operational testing (OT), the Concept Evaluation Program (CEP), and Force Development Test and Experimentation (FDTE).

Section III
Special Abbreviations and Terms
This section contains no entries.

INSPECTOR GENERAL ACTION REQUEST

For use of this form, see AR 20-1; the proponent agency is the Office of The Inspector General and Auditor General.

DATA REQUIRED BY THE PRIVACY ACT OF 1974

AUTHORITY: Title 10, USC, Section 3039.

PRINCIPAL PURPOSE: To secure sufficient information to make inquiry into the matters presented and to provide a response to the requestor(s) and/or take action to correct deficiencies.

ROUTINE USES: Information is used for official purposes within the Department of Defense; to answer complaints or respond to requests for assistance, advice or information; by Members of Congress and other Government agencies when determined by The Inspector General and Auditor General to be in the best interest of the Army; and in certain cases in trial by court martial other military matters as authorized by the Uniform Code of Military Justice.

DISCLOSURE OF THE SOCIAL SECURITY NUMBER AND OTHER PERSONAL INFORMATION IS VOLUNTARY. HOWEVER, FAILURE TO PROVIDE COMPLETE INFORMATION MAY HINDER PROPER IDENTIFICATION OF THE REQUESTOR, ACCOMPLISHMENT OF THE REQUESTED ACTION(S) AND RESPONSE TO THE REQUESTOR.

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COMPLETE PRESENT MILITARY ADDRESS (If no military address, state current civilian address, including Zip Code.)

SPECIFIC ACTION REQUESTED

INFORMATION PERTAINING TO THIS REQUEST (Use additional sheets if necessary; list inclosures if applicable.)

This information is submitted for the basic purpose of requesting assistance, correcting injustices affecting individual, or eliminating
conditions considered detrimental to the efficiency or reputation of the Army. I fully understand that I may be held

DATE	SIGNATURE

THIS SIDE FOR USE BY INSPECTOR GENERAL

(When completed, this form becomes an official communication in accordance with AR 20-1.)

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SUSPENSE Y Y M M D D * CASENAME:

CASENAMETYPED: SSN: * HOME CMD:

HOME UNIT:

* RECIPIENT: RECEIPTMODE:

* CASESTATUS: * SOURCE:

* SUBJECT: * COMPONENT:

* CASETYPE: INSPGENL:

TIMEAO: TIMETOTAL: * GRADE: * RACE:

* GENDER *(M/F/U)* SPECIALTY: ACKNOWLEDGE: Y Y M M D D

NOTIFICATIONDATE: Y Y M M D D * CLOSEDATE: Y Y M M D D

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* FUNCTION * AGCMDAGN * DETER AGAINSTUNIT

UNITTYPE USERCODE * LIFE CYCLE * RESOURCE

* SYNOPSIS *(Enter case summary, facts determined, action taken):*

* *Indicates a Required Data Element.*

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